

**Five teachers talk about contextual factors
involved in teaching students
on the autistic spectrum (AS) – a case study**

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Abstract

This thesis examined the contextual factors involved in teaching six students on the autistic spectrum (AS) in a regular primary school in Aotearoa/New Zealand. The research looked at the work of five teachers, including myself as a participant researcher. Through classroom observations and in depth conversations this research aimed to uncover how the teachers tried to meet the needs of their students on the AS and what affordances and/or constraints they encountered in their journeys. A social constructionist approach framed the research approach, together with a constructivist understanding of teaching and learning and these were used in conjunction with a philosophical activity theory base to explore mediators within the complex teaching and learning contexts.

The contrast between teachers viewing the AS as a disability or a difference was found to be important to the way the teachers constructed their student's value in the class or their willingness to try and meet the student's needs. This is in line with findings that teachers' attitudes towards disability are a key factor in the inclusiveness of teaching (Macartney & Morton, 2011; Tait & Purdie, 2000). The role of support professionals in developing inclusive teaching was found to be complex, being both affording and/or constraining for the classroom teacher.

The complexity of teaching and the myriad of mediators (Lampert, 1985) involved in teaching students on the AS was analysed to uncover a number of key mediators. One of the key mediators was found to be teacher construction of the student on the AS as competent which was linked to the construction of teacher as competent (Morton, 2011). Key affordances to viewing the student on the AS as competent were the teacher having a belief in the value and worth of the student as a person and a learner and having an understanding of what it means to be a student on the AS. Teacher willingness to be student focused was found to be an important affording mediator, where there was a perceived conflict between student need and school or national policies.

1. Chapter One - Introduction

I have long been interested in understanding why teaching and learning is more effective in some situations than in others, for teachers and their students labelled as on the Autistic Spectrum (AS). I wanted to examine the contextual factors and how perceptions of these affected the choices made by teachers. I decided to use qualitative research, as this involves the study of the particular, contextual and holistic aspects of a situation or thing as it exists (Lichtman, 2006). This interest was prompted by over ten years of observations and teaching experience, providing anecdotal evidence that some teachers seemed to enjoy working with students with learning and/or behavioural needs and appeared to be effective, while other teachers seem to struggle.

I was particularly interested in the attitudes and willingness of teachers in the teaching of students on the AS in ordinary classrooms, which is where the majority of students in Aotearoa/New Zealand are educated. I am on the AS and have a personal interest in autism and a bias towards the interpretation of AS as meaning potential to succeed (Sinclair, 2012; Winter, 2012), but requiring a highly structured or supportive approach, rather than difficulty with or deficits in things. In this thesis I have chosen to use the term autistic spectrum (AS), rather than autistic spectrum disorder (ASD) as I do not feel that I or others on the AS have a disorder.

Bevan-Brown, Bourke, Butler, Carroll-Lind, Kearney & Mentis (2012), report claims that inclusion of children on the AS into “mainstream settings creates challenges for teachers and students, and issues for students,” (p.634). I assumed that all teachers are capable of effective teaching of students on the AS, and this research aimed to look at what teachers perceived as barriers or affordances to their teaching in this area and why this might be.

Kearney and Kane (2006) suggest that inclusion is about not only the attendance of all students at their local school, but their being valued and accepted members of that school. Other researchers put forward the notion that “being present in ordinary classrooms alongside peers in a regular school is a critical feature of inclusion” (MacArthur, 2009, p.14). This thesis does not attempt to investigate the arguments around inclusion but seeks to capture a snapshot of teachers’ views as they seek to teach students on the AS within a regular classroom.

School and teacher acceptance and valuing of students on the AS are complicated by perceptions of the complex presentations of autism (De Clerq, 2011). This seemed to be different to those perceptions of students with purely physical or cognitive difficulties and may be due to the range of challenging behaviours that can be presented, as well as the range of educational difficulties that can be exhibited by some students on the AS.

In addition the expert model used to support students with learning and/or behaviour needs in regular schools, “perpetuates the notion that students with unacceptable behaviour lie outside what is ‘normal’ and that teachers only have the knowledge, skills and indeed the mandate to deal with students who exhibit ‘normal’ behaviour,” (Kearney & Kane, 2006, p.211). It could be speculated that teachers have the idea that students on the AS are ‘outside of the norm’ and therefore outside of their mandate.

Some research put forward the idea that initial teacher education did not provide adequate training in the area of special needs (Garner, 1996; Russell, McPherson & Martin, 2001). Other opinions suggested that teachers may be unwilling to teach students who are perceived to be academically low-achieving, and that teachers perceive students who exhibit challenging

behaviour to be more likely to be low-achieving and vice-versa (Ladd & Linderholm, 2008). Research has also found that teachers' attitudes towards disability are a key factor in the inclusiveness of teaching (Macartney & Morton, 2011; Tait & Purdie, 2000). Thus, if teachers view students as disabled or 'other' they can view those students as being too difficult to teach, or incapable of learning (Ladd & Linderholm, 2008). Other researchers identified the need for teachers to have a commitment to core values, and that these should underlie all inclusive teaching (Booth & Ainscow, 2002). This is because "values shape what teachers think and do: the way they view their students; their community; their school and its purpose; their work in the classroom; and the overall aims of education" (MacArthur, 2009, p15).

Another idea considered was that teachers didn't have the energy (Leaman, 2007) to put in the extra planning and the curriculum differentiation that many students with learning and/or behavioural needs require. In my experience, the "popular opinion among regular classroom and subject teachers that inclusion of students with special needs in their classes is a policy doomed to fail" (Jordan, Schwartz, & McGhie-Richmond, 2009, p535), was still supported by a number of teachers (personal conversations throughout South Island, Aotearoa/New Zealand, 2006-12).

None of these viewpoints seemed to provide a wholly satisfactory answer to the question of variation in willingness in teaching of students on the AS. By willingness, I mean having a favourable disposition towards the activity of teaching these students. This is further discussed in sections 1.5 and 3.5. It seemed to me that the complex contexts of teaching and the teachers' interactions with their students could be the key to discovering some answers. Lampert (1985) indicated that it was necessary to know more about teacher resources and contradictions, both internal and external. Crossley (2010) suggests the significance of context in educational

research. Kearney & Kane (2006) suggests that learning and actions develop through interactions between students, teachers and their contexts, including the classroom. These contexts needed to be observed in depth and analysed using a tool that was suitable for analysing the multiple layers of context that so that I could develop an understanding of the lived experience of teachers and their students on the AS.

1.1 The focus of this thesis

The focus of this thesis is the analysis of teachers' constructions of autism, their opinions, teaching choices and the contexts in which teaching and learning for students on the AS, took place in a regular primary school in Aotearoa/New Zealand, in which I worked part-time. Data was gathered from a school year of observations and conversations with teachers and their students on the AS in a neighbourhood school. This data was anchored in the national, school and classroom contexts within which it occurred, influenced by activity theory (AT) philosophy (Engeström, 1987). This framework will be explained in Chapter Three.

In light of research on the current issues within inclusive education in Aotearoa/New Zealand, I thought that this contextual data would provide insights about teacher perceptions of constraints and affordances to their teaching of students on the AS and how these influence their teaching. Macartney & Morton (2011) looked at teacher perceptions and practices of 'inclusion,' critiquing the notion of the student that is 'other' needing to 'fit in'.

Benjamin (2002) and Slee (2011) writing in relation to the UK, both argue that the political agenda of national standards in education is one of the largest constraints to learning for students with special educational needs, alongside the national curriculum levels being

referenced as the expected achievement for 'typical students'. Students who do not meet these expectations are unable to be viewed in this context as successful, nor their teachers as effective. The subject 'successful schoolchild' is thus constructed as students who perform certain tasks at particular levels at required intervals, and one of students who are enabled to be sufficiently compliant with their school's agenda to be institutionally included, (Benjamin, 2002). Linked to this notion of a successful student is the idea of effective teacher. Within the standards framework therefore an effective teacher is one whose students achieve the required levels at the nominated time intervals (Benjamin, 2002).

Kearney and Kane (2006) and Wills (2006), examined some of the larger system influences required to make education in Aotearoa/New Zealand inclusive and not exclusionary to particular (groups of) students. Millar and Morton (2007) explored the national frameworks of special education and curriculum policy, suggesting ways in which these could be merged to provide possibilities for improving inclusive practices in education. Winter (2012) suggests that for people on the AS, success is measured by being valued and validated and learning to accept oneself and identify as equal to others. In this notion of success, students on the AS would not be measured against specific academic targets but by their ability to participate in their own way.

My participant research was carried out with a view to extrapolating useful findings that could help myself and others, as support professionals and teacher educators, to better support teachers to be more confident and willing to meet the needs of their students on the AS. The research was undertaken with the idea that most teachers will come across at least one student on the AS in their career. If I could ascertain reasons why some teachers were more willing and

effective than others, then it may be possible to help all teachers in their teaching of students on the AS.

In 2008, ASD Guidelines were released that gave clear guidance for effective education of students on the AS (Ministries of Health & Education, 2008). These guidelines suggested that the current level of teaching of students on the AS varied widely and could be improved significantly. This thesis was therefore also timely in terms of what teachers are doing to try and meet the needs of their students on the AS.

1.2 Introducing the school context

This research was carried out in a mainstream primary school in Canterbury, Aotearoa/New Zealand (referred to as Canterbury Primary to ensure anonymity for the research participants) during the 2010 school year. The school context is influenced by internal and external policies and processes. In Aotearoa/New Zealand primary schools, principals have a huge influence not just on the ethos of a school but also on the curriculum and how it is delivered. This is due both to the flexible nature of the New Zealand curriculum, which states that each school must deliver a curriculum that meets the needs of its community (Ministry of Education, 2007) and to the devolved management of schools. Being devolved entities, the Principals and Board of Trustees are responsible for the school's functions. National laws regarding education must be followed with National Administration Guidelines (NAGs), National Education Goals and Guidelines (NEGs) providing additional guidance for schools. Teaching staff and school management are employed by the schools, but paid by the Ministry of Education. Individual teachers are often perceived as operating as discrete units within a school, not only maintaining individual freedom and autonomy, but also individual ideologies (Corrie, 1996). However

Zeichner, Tabachnick, & Densmore (1987) found that institutional norms influenced and could even control teachers, shaping their knowledge as their teaching was monitored and evaluated by the school

Canterbury Primary had three percent of students with high or very high special educational needs, as defined by the ongoing resourcing (ORs) Ministry of Education criteria, as well as another ten percent of students who had been identified as having learning or behavioural needs that did not meet funding criteria. Canterbury Primary welcomed all students who lived within the catchment zone.

The Aotearoa/New Zealand Education Review Office (ERO) suggests that three percent of the national school population have very high or high needs, the term used for students with significant physical, sensory, neurological, psychiatric, behavioural or intellectual impairment. These students are all expected to be educated in their local schools. A recent review of inclusive education of high needs students found that only half of schools demonstrate mostly effective inclusive practices (Education Review Office (ERO), 2010). ERO defines inclusive practice as “students with high needs successfully enrolling, participating and achieving in the academic, extra-curricular and social life of their school” (ERO, 2010, p.1). The review went on to suggest that schools and teachers need to become better at including students with high needs. Difficulties have been identified for schools implementing inclusive educational models as set out in Special Education 2000 (Ministry of Education, 1996), the legal framework setting out the right of all students to attend their local school (Wills, 2006). Additionally, inherent contradictions between inclusionary and exclusionary policies within school curriculum documents and norms have also been identified, such as the belief that disabled students should fit in with their peers (Macartney & Morton, 2011).

1.3 Effective Inclusion in New Zealand

In this thesis, inclusive education refers to the physical presence of students on the AS in regular classrooms in their local schools, where they are able to engage in active learning in a range of activities in school alongside their same chronological age peers. MacArthur (2012) suggests that children and young people's rights are the key elements in inclusive education. The Aotearoa/New Zealand national curriculum (Ministry of Education, 2007) and the Disability strategy (Minister for Disability Issues, 2001) both uphold children's rights.

Inclusion can be seen to be effective in just one aspect, for example; academic or sporting or social, through to highly successful in all aspects, with the student having social, personal and academic achievements or progress and being a valued and respected member of the school (Kearney & Kane, 2006). Effective inclusion can also be described as a continual organic evolution of improving practices, attitudes and valuing of diversity, that can always be further improved (Boyer, Thompson & Rasmussen, 2008; Dolezalek, 2008; Orlando, 2010).

The Aotearoa/New Zealand Education Review Office (ERO) stated that teachers require specialist knowledge and skills in order to be effective inclusive educators (ERO, 2010). This reflects on the expert model (Kearney & Kane, 2006). Prior to this research I had accepted this model and assumed that teacher skill and knowledge of the AS was the key to effective teaching of students on the AS. This assumption was supported by the evaluative indicators as defined by ERO for effective inclusion relating to classroom teaching. One of the given indicators for effective inclusion was "teaching is planned and differentiated with the learning of all students in mind" (ERO, 2010, p.40). I interpreted this to describe the way that teachers who effectively included students on the AS planned and delivered learning activities that helped the students to further develop their strengths and supported achievement in areas of difficulty. My initial

thoughts were that this required a prerequisite high level of understanding of the AS and teaching and learning strategies for students on the AS. Another ERO indicator for effective inclusion was around teacher skills and knowledge in communication. For example, students on the AS exhibit a range of language difficulties, which teachers need to understand if they are to communicate effectively with these students (ERO, 2010; Ministries of Health and Education, 2008).

As Hayes (2006) discusses, effective teaching is an elusive concept, with no clear cut definition or measurement. Student achievement can be measured in a variety of ways though formal and informal assessment and encompass a range of things. Hayes asks three questions, which he suggests are linked to the effectiveness of a teacher, “Will this person relate well to children or young people? Is this person amenable to receiving advice and guidance? Does this person have the potential to work as a member of a team?” (Hayes, 2006, p.45). For example, if a behaviour plan was developed by an educational psychologist, in conjunction with the school, the psychologist would then work with the class teacher to implement the plan. If the teacher was not amenable to receiving advice and guidance, or not willing/able to work in a team, it would be extremely difficult to implement the behaviour plan successfully (Goodall, 2011a). In this research, I was more concerned with what the teachers thought and felt, and how this was expressed through their words and actions, rather than with questions around their effectiveness.

Alton-Lee (2003) suggests that, “quality teaching has a central focus on raising student achievement for diverse learners. New Zealand educators need to break a pattern of inappropriately low expectations for some students... High expectations are necessary but not sufficient, and can be counterproductive, when not supported by quality teaching,” (p.99).

Achievement encompasses achievement in the essential learning areas and skills, including social and co-operative skills, commonly held values including the development of respect for others, tolerance (rangimārie), non-racist behaviour, fairness, caring or compassion (aroha), diligence and hospitality or generosity (manaakitanga), (Alton-Lee, 2003, p.7).

Tait and Purdie (2006) suggested that the attitudes of teachers towards students with disabilities influences achievement “because of the relationship, albeit complex, between attitudes and behaviour... Of primary importance to teachers, parents and students alike is the notion that negative teacher attitudes toward children with special needs are likely to have a negative effect on the outcome of inclusive programs” (2000, p.26). Given that students on the AS within this research were being taught in inclusive settings, I felt it was important to examine the teacher attitudes around autism.

MacArthur (2009) suggests that teachers will examine barriers to student learning when they see these students struggling to achieve, if they view these marginalised students as ‘active and capable learners’. In contrast teachers who understand their students through a medical model may “explain their students’ failure at school in terms of their perceived ‘problems’” (MacArthur, 2009, p.16). This research aimed to understand teachers’ constructions of their students on the AS and how these constructions influenced teacher choices and actions.

1.4 Effective Teaching of Students on the AS

It has been suggested there is a difference between knowing what autism is and actually understanding people on the AS and therefore being able to effectively work with or teach

people on the AS. Simpson, de Boer-Ott & Smith-Myles (2003) indicate that despite a huge increase in research around the AS, autism-related disabilities remain largely mysterious, even to many professionals. Peeters (2011) puts forward the view that people with autism have a different way of thinking, which leads to a different way of interacting with the world. De Clerq (2011) concurs with this idea, suggesting that visible manifestations of autism are the tip of the iceberg and the autistic thinking style is the rest of the iceberg. This way of thinking is different because the autistic brain interprets stimuli and constructs responses to these stimuli differently than a typically developed brain. Peeters (2011) and De Clerq (2011) both suggest that this difference in thinking and being means it is not enough for a teacher simply to be motivated to work with children or young people on the AS, but teachers need to understand autism from within in order to be effective educators of people on the AS.

Effective teaching of students on the AS should result in academic progress and socio-emotional growth and be based in realistic but high expectations (Powell & Jordan, 1997). In order to succeed at school, “children with autism need to have a structured day and teachers who know how to be firm but gentle” (Grandin, 2002). In contrast, Simpson et al. (2003) suggest that all children on the AS require a completely individualized education in order to experience educational success. Effective teaching of students on the AS is based on acknowledging and respecting the students’ sensory sensitivities, whilst requiring students to be present, participate and to learn (Bowen & Plimley, 2008). The special interests/fixations of students on the AS should be used to motivate the learning of new skills and knowledge, so that the student can focus on the targeted learning to try and minimise overload (De Clerq 2011; Grandin 2002; Peeters 2011).

Thomas (2011) stressed the importance of personal relationships when supporting people on the AS, and the need for these relationships to be based on respect and compassion for the person and their difficulties dealing with the world. Thus a teacher may see autism as a disability while having respect for the child and compassion for the difficulties that the child experiences. Alternatively a teacher may see being on the AS as ‘living within a different culture’, but they may have no respect for or understanding of the ‘culture’ of autism. McGregor and Campbell (2001) found that although mainstream teachers were accepting of the idea of the inclusion of students on the AS into the mainstream, they expressed several concerns. These ranged from concerns about the effects on mainstream pupils to feeling that they lacked the skills and knowledge to teach students on the AS. Special education teachers were more in favour of the inclusion of students on the AS in the mainstream than mainstream teachers. These specialist teachers felt the effectiveness and suitability of inclusion largely depended upon the individual students and their particular needs. Although these special education teachers thought that some students may receive a more effective education in special schools/units and some in the mainstream, their views may reflect experiences of teacher motivation and skill too.

Kearney and Kane (2006) suggest that the knowledge base of the education system creates ideology that informs beliefs, values and theories that in turn affect the ideas and practices of teachers. They suggest that the traditional special education knowledge base in Aotearoa/New Zealand was based on a clinical model, whereby students were either impaired or ‘normal’. Jordan et al., (2008) made the case that “effective inclusionary practices, and therefore overall effective teaching, depend in part on the beliefs of teachers about the nature of disability, and about their roles and responsibilities in working with students with special education needs” (Jordan et al, 2008, p.335). Although I felt that this may be the case, prior to this research I felt

that teacher skills and knowledge would be a more important factor in being an effective teacher.

Effective inclusive schools are places where every student belongs, is accepted by, supports and is supported by their peers, teachers and community members (Bevan-Brown, 2006; Pearpoint, Forest & Snow, 1992; Stainback & Stainback, 1996). Booth & Ainscrow (2002) talk about barriers to or support for learning and participation. Students can either be 'dis-abled' by their educational environment and learning experiences or they can be empowered through the removal of barriers to learning and effective, targeted teaching. This removal of barriers and effective teaching can be seen as effective inclusion.

I wanted to gain an understanding of how teachers felt about the AS and whether they viewed being on the AS as being disabled, having specific needs, being different, having a different culture or something else. De Clerq (2011) and Peeters (2011) suggested that teachers need to understand the culture of autism and work within that culture, rather than trying to change the child with autism to fit the 'neurotypical school culture'. Neurotypical (NT) is a term used commonly in the AS community to refer to people who are not on the AS (Larson, 2010).

Attwood (2011) goes further by claiming that teachers need to create AS-friendly classrooms and move away from the current model of teaching. He explains that children with Aspergers or with high-functioning autism are not motivated in the same way as NT children and will not respond well in a typical classroom. These classrooms would provide a low stimulus environment to prevent sensory overload. I wondered whether or not teachers would be able to identify what was and what was not AS-friendly in their own practice and their own classroom environment. Furthermore, even if teachers could identify these things, would they want to

make their teaching and classroom more AS-friendly or would they perceive barriers and reasons not to do this?

1.5 Willingness and teaching

“You are not a natural teacher, you will always have to work hard at it”, was a comment received at the end of my second (out of four) teaching practicums. I went on to graduate early to take up a teaching position in the school where I completed my last practicum, having worked very hard at becoming an effective teacher, who strove to ensure my students made progress in both the social-emotional sphere and within the curriculum.

In 1991, Hillard, suggested that, through hard work and practice, teachers could become more effective. Personally, that translated into the study and integration of different methods of teaching, including but not limited to Montessori apparatus and techniques into my classrooms. I developed an understanding of the potential within all students and a personal view that if a child in my class was not making progress then I needed to change something, either environmentally or what or how I was teaching, rather than trying to use a one-size-fits all approach (Zemelman, Daniels, Hyde, & Varner, 1998).

In my quest to continuously improve my effectiveness as a teacher, I studied equal opportunities in education, Mathematics, special needs education and Montessori pre-school and primary teaching diplomas. Maria Montessori (1870-1952), throughout her long career as a physician and an educator, expressed her belief that all children had potential, and developed a curriculum that enthusiasts claim can help all children to make progress towards independence.

As I planned my research, I became aware that I really wanted to focus on the willingness of teachers. Before I began this research, I was curious about the role of willingness in teachers' interactions with their students on the AS. I suspected that willingness played a key role in effectiveness as indicated by Waligore (2002) who stated that "willingness to include students with disabilities, and being better prepared for inclusive classrooms may be the first challenge for teachers," (p.9). However, first I needed to identify the concept of willingness to teach for the purposes of this thesis. I chose to use the Merriam-Webster online dictionary definition of willing as I felt that this was able to encapsulate all the attitudes and behaviours that I could seek to ascertain through my observations and conversations:

1: inclined or favorably disposed in mind : READY <willing and eager to help>

2: prompt to act or respond <lending a willing hand>

3: done, borne, or accepted by choice or without reluctance<a willing sacrifice>

(<http://www.merriam-webster.com/dictionary/willingness?show=0&t=1359342560>)

These definitions led me to look and listen for indications that the teachers were favourably disposed to the idea of interacting with and teaching their students on the AS and prompt to respond to these students' needs and interactions. Where I could observe or hear these dispositions and prompt actions I interpreted these as willingness to teach these students.

Did other teachers share the idea that all children have potential and does this idea make teachers willing to take the extra time and effort needed to try and meet the needs of their students on the AS? Did the teacher have caring and supportive relationships with their students

on the AS, which are suggested to be “vital to disabled students’ learning and well-being at school” (MacArthur, 2009, p 29).

A common idea is that a teacher is one who teaches, or who imparts knowledge (Dictionary.com, 2013). However, the job description for a teacher, in my random sample of personal and online job descriptions (for actual teaching positions in Aotearoa/New Zealand), were between three and eight pages long, with responsibilities being far wider than classroom teaching, with many encompassing areas like support for colleagues, commitment to personal professional development, Treaty of Waitangi knowledge and application, management of challenging behaviours and after-school activity responsibilities and curriculum development.

This illustrates that the current contractual responsibilities of teachers are multiple and are not just about imparting knowledge. Teaching expectations have intensified and obligations become more diffuse. The homogeneous classrooms of the past no longer exist in the public education system, so teachers have to work much harder to reach each student in their class now. “Not only are outside pressures on teachers increasing, they are also contradictory” (Hargreaves & Fullan, 1989, p.21).

In effect I wanted to see if data emerged from the observations and conversations during the school year that would illuminate the relationship between mainstream primary education teachers’ beliefs about disability and ability and their roles in inclusive classrooms, and how these are related to effective teaching. Russell, McPherson and Martin, (2001) and Stipek, Givvin, Samon, and McGyvers, (2001) indicated that the overall epistemological understanding that teachers bring to their teaching practices may be strongly correlated to how teachers develop their skills, knowledge and effectiveness. I aimed to use the data from this

research to identify possible relationships between teacher constructions and teacher effectiveness in relation to their students on the AS.

1.6 Epistemology and philosophical perspective

“All knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction with human beings and their world, and developed and transmitted within an essentially social context,” (Crotty, 1998. P42)

Constructionism is the epistemology within which this thesis is grounded; it is embodied within the theoretical perspectives of social constructivism and activity theory (Crotty, 1998) that informed my choice of methodology and methods. Constructionism is the view that meaning is actively created through the interaction of people with each other and their environment. Thus different people may “construct meaning in different ways, even in relation to the same phenomenon,” (Crotty, 1998, p.9). The thesis developed through the co-construction of knowledge between myself and the other teachers via on-going conversations in which identities and knowledge were constructed in discourses that categorised the classroom contexts and the students on the AS, facilitating the illumination of phenomena (Talja, Tuominen, & Savolainen, 2005).

Linked to constructionism, "constructivism is primarily an individualistic understanding of the constructionist position," (Crotty, 1998, p.58). Constructivism is the theoretical perspective that “individual creation of knowledge structures and mental models is through experience and observation,” (Talja, Tuominen, & Savolainen, 2005, p.82). Constructivism highlights the unique experience of each individual, as they create meanings through an active process of engagement with the world. This suggests that each individuals way of making sense of the

world is as valid and worthy of respect as any other (Crotty, 1998). In this research I was investigating the teachers' and my individual interpretations and constructions of teaching, autism and students on the AS, each of which is valid. Constructionists hold that the theoretical perspective that knowledge is a human construct that acts to order and explain our sensory experiences (Airasian & Walsh, 1997) and that, as humans construct their own way of knowing, which is dependent upon their social-cultural context, there can be no single valid methodology. As there is no truth that sits 'out there' waiting to be discovered, but multiple truths all created, produced by each knower from existing beliefs and experiences. All knowledge is constructed and consists of what individuals create and express. Since individuals make their own meaning from their beliefs and experiences, all knowledge is tentative, subjective, and personal. Knowledge is viewed not as a set of universal "truths," but as a set of "working hypotheses." Thus constructionists believe that knowledge can never be justified as "true" in an absolute sense. (Airasian & Walsh, 1997, p.445).

Social constructivism is a theoretical perspective within the epistemology of constructionism that stresses the importance of the socio-cultural context of the people creating the mental constructs that constitute knowledge and the transmission of that knowledge (Crotty, 1998). Social constructivists theorize that knowledge is constructed by a person's interaction with their social context(s). Thus knowledge is a change in that person and may also result in a change in their context. In the case of this research, teachers exist within and both exert influence upon and are influenced by external and internal contexts.

As a social constructivist, I would theorize that the teachers' knowledge has a socio-cultural component and is not just generated by an individual teacher acting independently of their social contexts. This means that I needed to recognize the socio-cultural contexts in which the

teachers constructed their knowledge and teaching skills and values in order to look at why some of the teachers were more effective than others at teaching students on the AS regular classrooms.

Burr (1995) suggests the ways in which people understand the world and the concepts people use are both historically and culturally specific. “Knowledge is sustained by social processes... the social constructionist answer is that people construct it between them,” (pp4) Social constructionists perceive that knowledge is based on and grows from the interaction of people and their individual perspectives. I aimed to co-construct knowledge about teacher attitudes and willingness to teach students on the AS with my colleagues in their classroom contexts, whilst being both colleague and researcher.

Even whilst knowledge is being created between two people, it doesn't mean they are creating the same set of understandings or representations. This is because people each bring their own prior experiences, understandings and contexts with them, resulting in contestable understandings, which are always able to be interpreted differently by different people. Being on the AS I can often interpret things that I think are shared knowledge very differently from the co-creators of that knowledge.

Social constructionism theorises that “knowledge is social in origin; the individual lives in a world that is physically, socially and subjectively constructed; mutual constitution of the individuals' knowledge structures and the socio-cultural environment,” (Talja, Tuominen, & Savolainen, 2005, p.82). Crotty (1998) emphasises the importance of culture on individuals, suggesting it not only moulds viewpoints, but also feelings. The constructions of knowledge are actively “informed by a particular perspective and shaped by various implicit value

judgments,” (Gordon, 2009, p.39). I was interested in exploring teacher constructions of their students on the AS, what their perspectives and values were and how these interacted with the cultural context of school, community and national education policy.

I additionally chose to use activity theory which provided a useful perspective with which to study of the activity of individuals within a complex context. Using activity theory enabled me to focus on important categorical elements of the context and to look at how these elements afforded or constrained the teaching of students on the AS. This is because “there are *multiple mediations* in an activity system. The subject and the object, or the actor and the environment, are mediated by instruments, including symbols and representations of various kinds. .. rules, community, and division of labor,” (Engeström, 1999, p.68). I wanted to investigate how teachers resolved the complex demands of teaching and any contradictions they experienced. Engeström, (1999) went on to describe how contradictions in activity manifest themselves through large or even small unremarkable changes in practitioners’ everyday work actions. He indicated that the challenge was to uncover these changes and analyse them.

Due to the immense complexity of teaching, I wanted to be able to capture not just teacher views, but the contexts within which those views were situated. I hoped that observations would provide a strong base for being aware of the myriad aspects of the context, and that this would aide my interpretations of why teachers held their differing views and opinions. Through participant research case studies, I aimed to uncover opinions that may not be shared with outside observers. I believed this was important in order that this research be able to shine a light into current areas of concern held by teachers in order to be able to address those concerns in the future.

In my research I wanted to capture and detail teachers' experiences as expressed to me, of their meaningful reality around meeting the needs of their students on the AS. The philosophical stance behind my choice of participant observation case studies is both activity theory and social constructivism. Activity theory addresses the need to study individuals within their complex contexts in order to gain an understanding of their actions (Daniels & Cole, 2002). Social constructivism is able to be used alongside activity theory as a philosophical lens through which to analyse how the teachers socially constructed their views and opinions within the complex contexts in which they worked as both are philosophies are focused on the socio-cultural context (Jonassen & Rohrer-Murphy, 1999). In this research I was investigating teacher constructions and interpretations of themselves and their students on the AS and the interaction between these and various elements of the complex teaching context.

Descriptive field notes of my observations of interactions between teachers and their students on the AS during the school year were annotated with my observer comments (Bogdan & Biklen, 2007) were kept in order to facilitate an examination of the complex context and the teachers' constructions and interpretations. In some observations I was minimally involved in the classroom, but in other observations I was fully participating as a team teacher or supporting teacher. My observations were complemented by unstructured interviews/conversations with these teachers following on from the observations. The conversations were recorded through the use of a mix of verbatim phrases and paraphrased records on paper both during the conversations and using retrospective post-hoc recall and note taking to capture as much of the data as I could. Where notes were verbatim this was indicated through the use of speech marks and a T for the teacher speaking and M to denote my speech.

Member checking of early drafts of thesis was used to facilitate authentic representations of teacher words, actions and my interpretations of these (Harrison, MacGibbon & Morton, 2001). However, I was unable to obtain feedback from any of the parents or children involved as they have all since relocated away, post-earthquake. Chapter three provides further details about the methodology.

Looking at the phenomenon of teaching students on the AS, I was aiming to unearth some of the different meanings that each of the teachers, myself included brought to the actions involved in meeting those students' needs. In accordance with a constructionist epistemology, I did not seek to put forward value judgements around other teacher's views and opinions, but to present them within their contexts as possible explanations for these views and opinions.

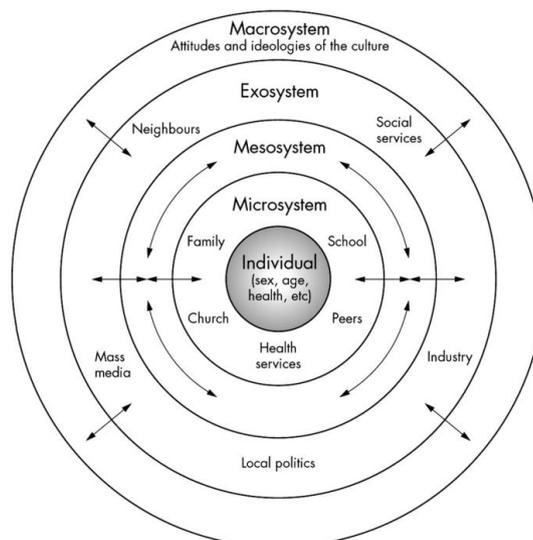
“Obviously it is possible to make sense of the same reality in different ways,” (Crotty, 1998, p.47) and where a teacher and I have very differing interpretations of a common situation, I hope that through the presentation of contextual conversation the reader is able to gain an insight into why our understandings are so different. It has been suggested that constructionism is not conceit, that it is curiosity (Crotty, 1998). Although at times I may feel my interpretation is valid, I accepted that within the meaningful reality constructed by the other teacher(s), their interpretation was valid for them at that point. However, curiosity then drove me to look for explanations and rationale based on my observations and conversations with these teachers.

1.7 The Complexity of the Context

When I reviewed my experience as a classroom teacher, a special education advisor and consultant I realised that because teaching is a complex task with large numbers of factors involved, I would need a theoretical framework to accommodate this complexity. “There is a contextual surround that invariably shapes the educational process. The political context is critical...The social context is equally or perhaps even more critical” (Goodlad, 1997, p.23).

I wanted to place my interpretations of factors within a social constructivist (Airasian & Walsh 1997) framework as this where my epistemological base is. I therefore started with a representation of Bronfenbrenner’s (1979) ecological model of integration. In this model people, in this case teachers, are located at the centre of concentric circles of context, surrounded first by their immediate environment, such as family or classroom, then by wider community, such as school and then finally national and socio-cultural frameworks. In this model the person’s internal factors are placed within themselves in the central circle.

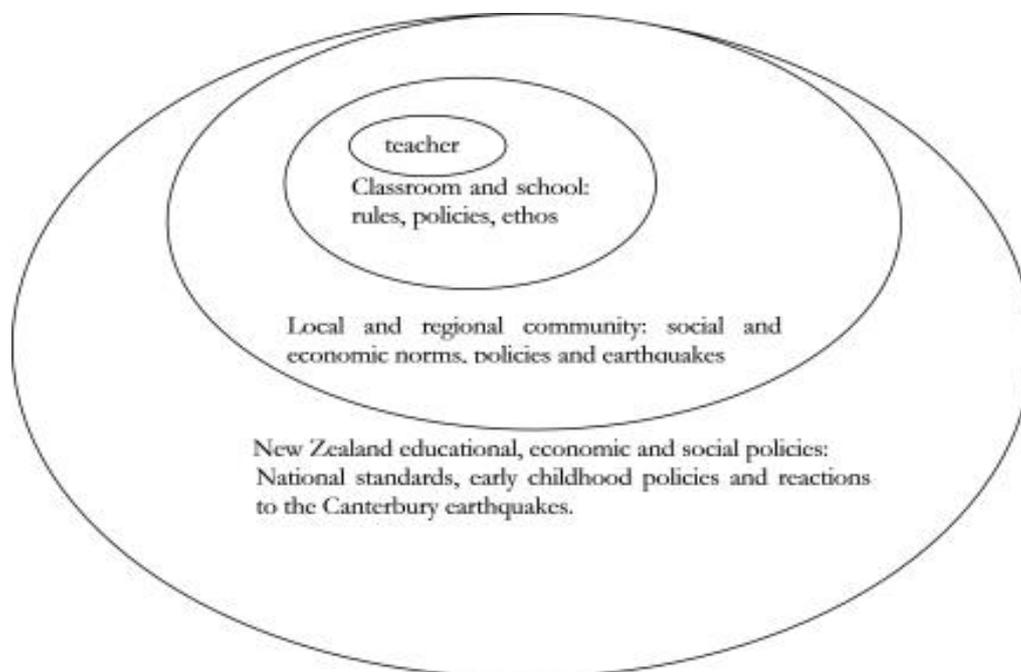
Figure 1 – Representation of (1979) Bronfenbrenner’s ecological model of contexts



(McLaren & Hawe, 2005, p10)

McLaren & Hawe (2005) designed this conceptual framework to illustrate individual and environmental determinants of behaviour. The diagram shows a series of concentric circles, each of which represents a level of influence on behaviour. Within the ecological perspective a core idea is that there is interaction and reciprocal causation among and between levels. I adapted the model above as an aid to visualize the contexts that I wished to observe and question as part of my research. This adapted model is shown in figure 2.

Figure 2 – Adaptation of the ecological model, demonstrating contexts for this research



Within this adaptation, I expected that there would be interaction both within and between levels, and that changes in one level might affect one or more of the other levels. For example, teachers may adapt their teaching in response to changing school policies or changing national frameworks. I thought that a teacher as a person would provide the most insights into how the different contextual levels affected their teaching of individual students.

"He aha te mea nui o te ao? He tangata! He tangata! He tangata!" (Ngata 1874 – 1950) Usually translated as - "What is the most important thing in the world? It is the people, it is the people, it is the people!"

Within this thesis, I hoped to maintain the focus on the teachers and their perceptions, as I believe that understanding the teacher is fundamental to wider investigations of teaching students. Through analysis of teacher perceptions, I aimed to look at constraints and affordances to the teaching of students on the AS.

1.8 Activity Theory - A Philosophical Framework for Complex Contextual Analysis

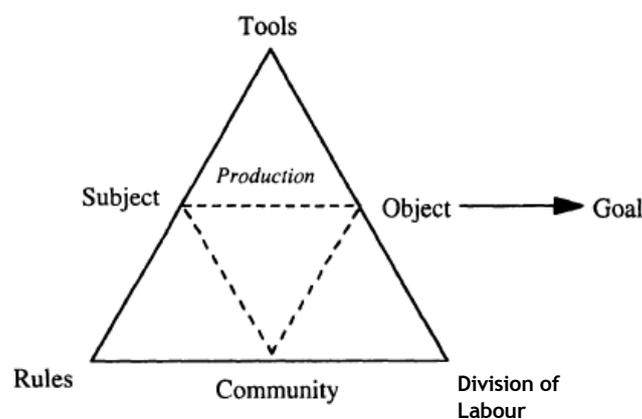
In order to try and ascertain the relative influence various factors asserted on teacher effectiveness in this study, I needed a framework that acknowledged context in all its complexity and the interplay between different aspects of the context and how this influences subjects as they seek to achieve an aim or goal. I chose to use the activity theory framework developed by Vygotsky (1979, 1986) and which has been demonstrated by Engeström (1987) as an effective educational contextual analysis research tool to assist my reflections of teacher conversations and observed actions.

Activity Theory, which will be discussed more fully in Chapter Three, is based on the argument that in order "to understand individual action and support individual and system development we must study action in the context of the broader activity in which it is taking place" (Daniels & Cole, 2002, p.311). This framework allowed me to map and analyse the complex interactions

and relationship between all the contextual influences on the teachers as they tried to meet the needs of the students on the AS (Engestrom & Meittinen, 1999).

As I process information by mentally building large interactive pictures of words, the ability to build a visual template or framework into which I could place words indicating observed phenomena within the classroom, school, and national educational policy contexts was both interesting and useful. I therefore chose to create tables of these events, which enabled me as writer to encapsulate a snapshot of mediators and observations. Engeström's activity system model was useful for me in this context as it enabled me to capture and represent complex classroom contexts in a framework that was consistent with social constructionism.

Figure 3 - Activity System Model (Engeström, 1987, p.78)



I theorized that I could use the categories within this diagram to create tables which would enable me to illustrate relevant mediators for the teachers. This is explained and presented in Chapter Three.

I anticipated that, through the use of an activity theory based analysis of the contextual influences on detailed classroom observations and conversations; I would be able to understand

why some teachers were more positive and engaged in terms of teaching students on the AS, than other teachers. Through this I aimed to be able to suggest follow-on research into possible ways to improve teacher effectiveness for inclusive education for students on the AS and perhaps extrapolating into the effective teaching of children with other diverse needs.

1.9 The New Zealand Context - Current Teaching of Students on the AS

At present there are five different educational placements available for school age students in Aotearoa/New Zealand. Children in Aotearoa/New Zealand may and usually do start school on their fifth birthday, though full-time school attendance is not compulsory until a child's sixth birthday. There is no requirement to attend pre-school, though there is a national policy in place which funds twenty hours of pre-school for three and four year olds. This funding is not available to children who remain at pre-school after they have turned five.

Public schools are either regular, with open entry, or special schools, for which the child has to meet strict criteria in order to gain a place, or Maori medium schools, known as kura kaupapa. Private schools are fee paying and may or may not have other criteria for students to obtain a place. Regular schools may have special needs groups or units within them, which may or may not have criteria attached. Parents/whanau have the legal right to a place at their local regular school for their child, no matter what the child's needs and/or strengths are.

The 2008 ASD Guidelines (Ministries of Health and Education) provide schools with evidence of best practice guidelines about effective teaching for students on the AS. These include information about the importance of structured communication teaching and the management of sensory sensitivities.

1.9.1 Discrimination in Aotearoa/New Zealand Education

Although this legal right exists for a full time place at the local public school, some students with special needs are being denied this access. The main advocacy agency for people with intellectual disabilities in Aotearoa/New Zealand (IHC) has been waiting for over three years for a response from Crown Law with regards to a formal complaint. On “31 July, 2008 IHC lodged a complaint to the Human Rights Commission about Government practices which result in discrimination for children with an intellectual disability in their local school.” (IHC, 2011)

IHC’s complaint alleged that the discrimination experienced by children with special needs occurs as a result of a mix of factors, including but not limited to education law, Ministry of Education and individual school policies and practices. This discrimination was evidenced when schools suggested to parents that another school might meet their child’s needs better and/or refusing to have a child on the school premises when the child was not supported on a one-to-one basis by a Ministry of Education funded teacher aide.

Another lobby group, the Inclusive Education Action Group (IEAG), was launched in the Aotearoa/New Zealand parliament in 2007 to raise awareness of issues, to put forward and action solutions. As reported, IEAG believe that significant changes need to occur across the education system, “so that people with impairments can say that they live in a society that highly values their lives and continually enhances their full participation,” (Morton, Higgins, MacArthur & Phillips, 2012).

A 2010 report to the United Nations also suggested that “Many children with disabilities are only able to access schools and early childhood services for limited hours and miss out on wider curricular activities and the sense of belonging within their educational community”

(Action Children and Youth in Aotearoa Incorporated, 2010, p.29). Compounding this evidence of discrimination against students with special needs, Deaf Aotearoa have also made a complaint to the New Zealand Human Rights Commission with regards to the right of students to access their own language – New Zealand sign language, which is an official language of New Zealand. “The complaint was made because the Ministry of Education had not recognized New Zealand Sign Language as a medium for education nor the role Deaf identity and culture play for deaf students’ education” (Action Children and Youth in Aotearoa Incorporated, 2010, p.29). This suggests that in 2010, when this research was carried out, discrimination still existed within the Aotearoa/New Zealand education system.

1.9.2 Special Educational Needs Funding and Support for Students on the AS

Where a student on the AS receives Ministry of Education funding for their special educational needs, and attends a regular school, they are entitled to teacher aide hours (between 5 and 25 per week) and a specialist teacher for 1:1 support and coordination (2.5 or 5 hours per week). If a student does not receive this funding, a school may or may not provide teacher aide support, as the funding for this then needs to be taken out of the school’s own operational funds.

Funding is currently obtained through the completion of a long form giving adequate proof that a student meets current deficit requirements. The system is the New Zealand Ministry of Education’s Ongoing Resourcing Scheme (ORs), previously there was a reviewable component and it was known as ORRs funding (Appendix 2 details funding eligibility).

Funded students on the AS are also allocated a case worker from the Ministry of Education’s special education section (SE). The SE case worker is most likely to be a speech language

therapist, though it could be a special education advisor, educational psychologist, occupational therapist or physiotherapist.

The SE case worker attends individual education plan (IEPs) meetings and can also help schools and families/whanau to access other services and support for the funded student. Case workers are also able to assess and evaluate students and support teachers planning to meet the needs of students, or to refer the student to another case worker who is able to do this.

1.9.3 Culture and Inclusion in Aotearoa/New Zealand

During 2008-11, within the Ministry of Education, there was a focus on raising achievement for Maori and Pasifika students. Much of the information presented orally to group special education staff, presented views that knowledge is culturally located, which is in accordance with social constructivist perspectives (Richardson, 2011). This viewpoint recognises that students should not need to leave their culture at the front door of the school, rather that schools should be culturally inclusive places (Alton-Lee, 2003; Bevan-Brown, 2006; Richardson 2011). Should ASD become viewed as a cultural difference rather than a set of deficits, schools identifying as culturally inclusive would present a learning environment more in tune with the way students on the AS think, learn and express themselves (De Clerq, 2011; Peeters 2011).

The traditional ways of teaching and learning within Maori and Pasifika cultures has theoretically been moved to centre stage as relevant for schools in Aotearoa/New Zealand. This has implications for raising achievement and increasing inclusion for students with special needs as it talks about all students, including those with special needs, having cultures that need to be understood and reflected in schools (Bevan-Brown, 2006).

However, the understanding of autism as a cultural phenomenon with its own values and social norms has a fledgling status in the world, despite having over a hundred thousand web pages brought up in an ‘Aspie Neurotypical’ Google search. New Zealand pages of this search in 2011 represented less than 2.8% of the worldwide internet pages on this topic, reflecting the minimal influence of this idea, locally, at this moment in time.

For example the American based www.aspiesforfreedom.com, is a support group building an autistic culture and bringing *aspies*/autistic people together. Their home page (on 2.2.2011) states that “Being autistic is something that influences every single element of who a person is - from the interests we have, the ethical systems we use, the way we view the world, and the way we live our lives. As such, autism is a part of who we are.”

At the end of 2012, New Zealanders who self-identified as being on the AS joined an Australian autistic self-advocacy network, ASAN Australia and New Zealand. This is a web-based organisation that seeks to ensure the voice of adults on the AS is heard in discussions about us. There are a number of private web based groups for adults on the AS which focus on members being able to express themselves in a way that they feel comfortable. Additionally, in 2013 an AS conference focusing on lived-experience and self-advocacy is being held in Hamilton, New Zealand.

Peeters (2011) and De Clerq (2011) are leading this understanding of the AS as a cultural phenomenon within Europe and brought their research and understandings to the Asia/Pacific region in 2011. The idea that only people with autism can truly understand what it means to live with autism, challenges the ‘expert model’ of teacher/doctor knows best and places the

lived experiences of people at the centre of current research in Belgium and Australia (Attwood, 2011; De Clerq, 2011; Peeters, 2011).

This 'lived experience as expert model', is reflected in the view that the most effective teachers of students with Aspergers are those who have Aspergers themselves, or who have a parent with Aspergers (Attwood, 2011). This would mean that neurotypical teachers with no family history of Aspergers could use the lived experience of adults on the AS to support effective teaching of those students.

1.9.4 Teacher Education in Aotearoa/New Zealand

It is important to note that at the beginning of this study there was no requirement for graduates to have completed any compulsory courses in special needs before becoming registered teachers. Nor is it necessary to have any special needs qualifications to become a specialist ORRs/ORs teacher. These are the teachers who provide specialist support to children who have high to very high special needs in regular schools in Aotearoa/New Zealand.

The skills and knowledge I aimed to focus on for the purpose of this research were; understanding what the AS is, how it impacts on teaching and learning, being able to modify teaching to facilitate learning and progress, and ensuring that communication takes place between the teacher and child on the AS. However, it may have been unreasonable of me to expect that classroom teachers would demonstrate these skills and knowledge, since they did not have any training in the area of the AS during their teacher education degree programmes.

In Australia, it is mandatory for all teacher education programmes to include Aboriginal and cross-cultural awareness studies, teaching children with special needs and information and communication technology (ICT). The inclusion of these courses became compulsory as educators and educational leaders realized teachers were needing to meet the needs an increasingly heterogeneous classroom.

This struggle to meet the needs of each individual within a class is evident here in New Zealand, with many new graduate teachers at a loss as to how to ensure learning for their students who demonstrate difficulty with learning (personal conversations with new graduate teachers and principals 2006-2011). Classrooms and other types of groupings of children in schools are always characterized by diversity or heterogeneity.

‘Quality teaching raises achievement’ is a key finding in reports, including the Ministry of Education’s Best Evidence Synthesis of quality teaching (Alton-Lee, 2003), which reported ten characteristics of quality teaching. This research also stated that “New Zealand educators need to break a pattern of inappropriately low expectations for some students, particularly Māori and Pasifika learners, low achievers and some students with special needs” (Alton-Lee, 2003, p.31).

In theory, quality teaching should be effective teaching for all students, and the Ministry of Education’s Best Evidence Synthesis of quality teaching report suggested that effective teaching should be firmly rooted in the notion of teaching within a framework of diversity. However, this framework is not yet part of the training of teachers in Aotearoa/New Zealand.

The concept of 'diversity' is central to the synthesis. This frame rejects the notion of a 'normal' group and 'other' or minority groups of children and constitutes diversity and difference as central to the classroom endeavour and central to the focus of quality teaching in Aotearoa, New Zealand. It is fundamental to the approach taken to diversity

in New Zealand education that it honours Articles 2 and 3 of the Treaty of Waitangi. (Alton-Lee, 2003, p.v)

There is no requirement for teachers to have learned about any aspect of diversity other than the Treaty of Waitangi, Te Reo Maori (Maori language) and Tikanga Maori (Maori culture and customs, Maori world view) during their training, making it hard for teachers to apply these principles of diversity and difference to their everyday teaching. Even though teacher training includes Tikanga Maori, there is little guidance on how to teach children these concepts. For example, creation explanations are often presented by teachers as stories or myths, when they may be perceived as factual by children raised in Maori whanau/families.

Extrapolating this idea of teacher training/education being central to guiding teachers about what and how to teach, it can be suggested that a lack of information about the AS and the effect of this on teaching and learning can make it difficult for new graduate teachers to be as effective as they could be at teaching students on the AS. However, if a new graduate teacher has a personal understanding and awareness of the AS and what living with autism is like they may well be more effective than other new graduate teachers without this foundational understanding.

1.10 Introduction to thesis chapters

The focus of this thesis is the perceptions of teachers about the effects of the complex teaching context on their choices about how and what to teach students on the AS. In the following chapters I will firstly define terms that will be used within this thesis to aid shared understandings of the research and the findings. In the context of the AS, the idea of needing to define concepts clearly is to create shared understandings, rather than taking them as a given.

I will then examine some key contextual factors affecting teachers within the Aotearoa/New Zealand educational realm during the period of this research and introduce some of the generic tensions that some of these issues have raised. I will also briefly mention the Canterbury earthquakes of 2010 - 2013, which affected the social, economic and physical structures and well-being of the communities of Canterbury both during and after this research.

My own reflective practice was a tool for helping me theorize my actions and my interpretations of my data, in line with my social constructivist approach. Therefore when I introduce the research participants, the teachers and students on the AS, I will introduce myself. In this section I will also explain the choice of pseudonyms for the teachers and students, and the reasons for using some quotations anonymously. At the end of chapter two, I clarify the thesis focus and research aims.

Following this, I will detail the theoretical frameworks used, the methodology and the research design, including how data was gathered. This methodology section will further explain the activity theory framework and how it was used to analyze the data obtained.

The three findings chapters will be presented in a sequential order that arose out of the research design and the analysis of the data using the activity theory framework. Firstly I will examine the role of teacher skills and knowledge in the effective teaching of students on the AS, as prior to this research I had assumed this factor was the key and I had built support for this into my research design.

The second findings chapter will examine the role of the willingness of teachers in the effective teaching of students on the AS, as during analysis of the role of skills and knowledge it became apparent that even though two teachers had similar levels of skills and knowledge, these were not applied evenly. Upon closer review of conversations with the teachers it became apparent that a willingness to teach as effectively as possible had a large impact.

The third findings chapter presents the idea that subversion had a role to play in the effectiveness of the teaching of students on the AS, and that this subversion was directly linked to the level of teacher willingness to be as effective as possible. Within this chapter I discuss the teachers' personal factors, such as ethics and values that seemed to impact upon their desire to subvert the school and national rules and policies to achieve more effective outcomes for their students on the AS.

Finally, in the discussion and conclusion chapter, I place these findings within the school and national contexts to examine possible future research or activities that may help to improve teacher effectiveness in teaching students on the AS. An analysis of the usefulness and limitations of the activity theory framework will also be presented. Finally, a possible solution to the need for the theoretical framework to manipulate more layers of complexity will be introduced.

Throughout I will explain the role of my bias in choosing which conversations to quote, and why I examined some issues in more depth than others. This research has forced me to become more self-aware and reflexive in a way that I have not been before. My level of self-awareness and understanding of my attitudes and behaviours has changed dramatically over the course of this thesis and is an integral part of my findings and writing.

2. Chapter 2 - Effective Teaching of Students on the AS

This thesis is grounded within the classroom environment of teaching students on the AS and aims to reflect the lived experience of their teachers. This context is complex and encompasses not just the immediate classroom environment but wider social and political paradigms. Issues within the wider context are introduced in this section as it provides the reader with the outline of a framework in which to situate the teachers' viewpoints.

In this chapter core terminology will be defined in order to facilitate shared understandings of this research and findings. As meanings are always contestable (Burr, 1995), in order to investigate anything with other people, it was first necessary to try and arrive at a shared understanding of the concepts being looked at. These definitions have been used throughout the discussions with teachers as well as the research design and analysis.

The various models of disability will be used to examine the construct of autism as a difference or as a disability, with a view to understanding how this affects the attitudes of teachers towards their students on the AS. The idea that framing of the AS as 'difference' may increase teacher effectiveness will be looked at in light of other research.

Some of the key political and educational contextual factors affecting teachers within the Aotearoa/New Zealand educational realm during the 2010 school year will be introduced, along with some of the overarching tensions that some of these issues have raised for teachers and schools. A brief mention of the Canterbury earthquakes of 2010 and 2011 will be made, as these earthquakes affected a range of external contexts and internal factors throughout Canterbury both during and after this research.

Following on from these key contextual components I will introduce the thesis focus and research questions.

2.1 The Need for Definitions

One of the difficulties of communication is ensuring shared meanings are understood by all people involved (Scharp, 2003). Even then, “different discourses construct social phenomena in different ways, and entail different possibilities for human action...some ways of representing the world appear to have an oppressive or constraining effect upon some groups in society,” (Burr, 1995, p.15). This even though two teachers may share the same definition of what the AS is they may hold different viewpoints about what that means when teaching a student on the AS. For example, a shared understanding of receptive language difficulties as a part of the AS may lead one teacher to place an emphasis on trying to develop receptive language skills, and the other to introduce support strategies to enable the student to compensate for this area of difficulty.

Working with students on the AS and their teachers has raised my awareness of the need to be clear about the intended meanings of words, rather than assuming the meanings are shared. For example, if I talk about a kitchen bench to a New Zealander, this is the surface above the cupboards on which food can be prepared. However, to a British person the kitchen bench is a multi-person seat in the kitchen.

In this study key concepts that required shared understandings are: the AS, inclusion/inclusive education and effective teaching of students on the AS. Additionally, many of these concepts can mean many things to many different people, so I have defined how I used them in the

context of my study design, implementation and analysis. Figure 4 illustrates three different ways autism is sometimes described.

Figure 4 – Definitions of Autism

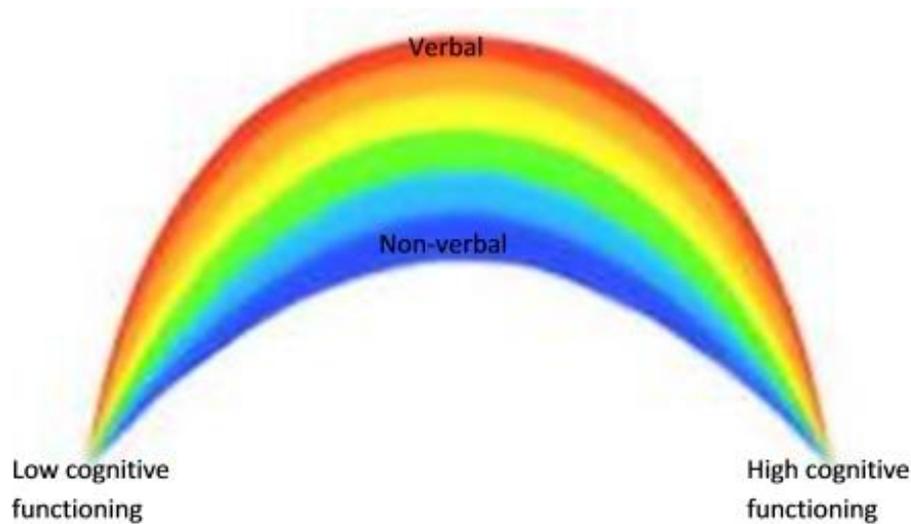


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2.2 *Defining the Autistic Spectrum (AS)*

Autism/Autistic Spectrum Disorder (ASD) is the term currently most preferred (Autism First, 2007) by parents and professionals to describe a whole range of complex, life-long developmental issues that occur in differing degrees of severity and a range of forms. ASDs affect the way a person understands, communicates and relates to the world around them. The spectrum usually includes Autism (severe, moderate, mild); High Functioning Autism; Aspergers Syndrome; Pervasive Developmental Disorder – Not otherwise specified (PDD–NOS) and often includes a variety of semantic–pragmatic disorders of language (Ministries of Health and Education, 2008). Figure 5 illustrates the range of cognitive and verbal skills within the AS.

Figure 5 – Visual representation of the autistic spectrum



People on the AS can be anywhere on the spectrum as represented above. For example, they may have mid-range cognitive functioning and some, but not many, verbal skills. This would place them in the centre of the figure 5. People with Aspergers have high cognitive functioning and are verbal so they will be towards the very right in the red band in the figure 5. However, there are also a number of people on the AS who are verbal sometimes, but not at other times, and they could be envisioned within the green band. However, cognitive functioning is a controversial description within the autistic community as autistic experience suggests that the expression of cognitive functioning is not fixed but variable.

Currently, AS is a psychiatric/medical diagnosis defined by the American Diagnostic and Statistical Manual (DSM-IV-TR, until June 2013) and the international classification of diseases (ICD-10). (Appendix 1), which both state that, for a person to be diagnosed with an ASD, they must have a qualitative impairment in social interaction, communication and restricted repetitive and stereotyped patterns of behaviour, interests and activities, with the criteria for Aspergers requiring no qualitative impairment in communication.

This places ASD firmly within the ‘medical model of framework of disability’. This model individualises people’s needs and sees them as requiring treatment,” (Morton & Gibson, 2003, p.10). It has been argued that social constructionists “present disability as an oppressive and normative construct deployed against minorities enforcing social marginalization,” (Slee, 2011, p.67). Although I agree that this is how I think society uses the concept of disability, I have never understood the AS to be a disability or a disorder, but a neurological difference.

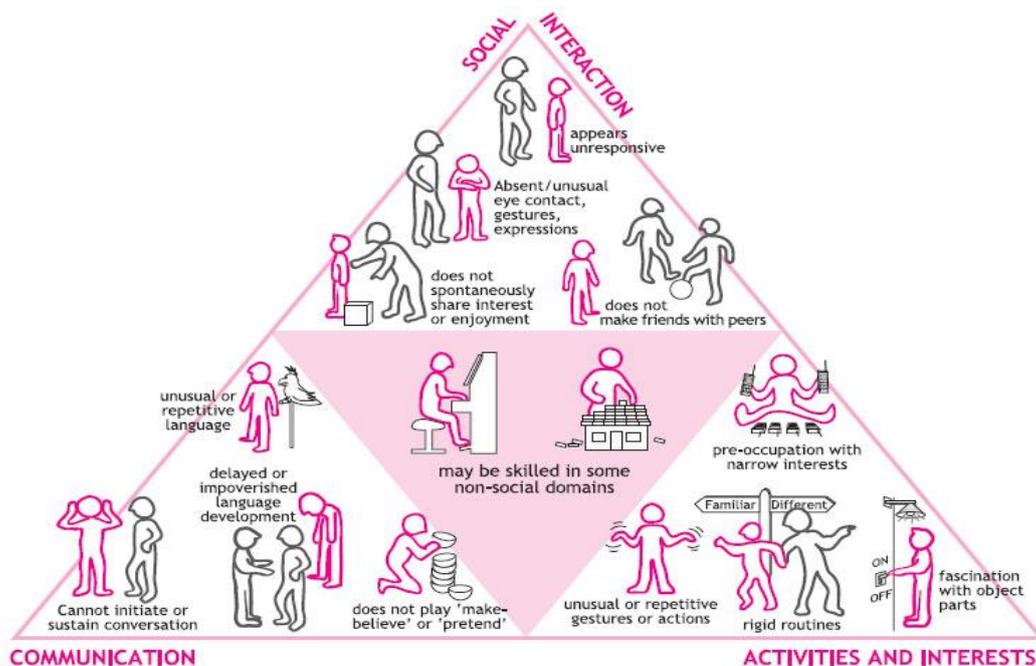
2.2.1 Impairments present in the AS

In the classroom AS can be recognised using the medical model; by the triad of impairments (Bowen & Plimley, 2008). Here impairments are identified from knowledge of the individual's development and behaviour. This triad of impairments was the working explanation used for this research. The triad includes:

1. **Social interaction** – problems engaging in reciprocal social interactions (Bowen & Plimley 2008; Ministries of Health & Education New Zealand, 2008; Schneider, 2009; Valente, 2004).
2. **Communication** – Difficulties in all aspects of communication. ASD concerns communication rather than language, with a difficulty in understanding the socio-cultural norms of communication and a difference in semantics and pragmatics from the socio-cultural norms. Communication, at all levels of ability, is usually directed at having needs met, rather than sharing information or interests (Baron-Cohen, 1995; Bowen & Plimley, 2008; Ministries of Health & Education New Zealand, 2008; Schneider, 2009).
3. **Imagination/Thought and behaviour** – difficulty in developing flexible creative thinking. This often leads to repetitive thoughts and actions and difficulties with symbolic/imaginative play, often termed the Theory of Mind or Mindblindness (Baron-Cohen, 1995; Bowen & Plimley, 2008).

In addition, repetitive stereotypic behaviour (persistent actions, ideas or thoughts) is also present. Everyone on the AS shares a difficulty in making sense of the world in the same way that neuro-typical people do (Jurecic, 2011). A range of other problems (sensory, motor disturbances and rate of development) are also commonly found in association with the triad but the three basic impairments are the defining criteria. Some people on the AS are skilled in areas that do not require high levels of social competency (Open Learn, 2011), whilst others learn strategies to facilitate social competency. Figure 6 is an example of visual illustrations of the triad of impairments.

Figure 6 – The triad of impairments in ASDs



(Open Learn, 2011)

The above diagram presents a visual image of some of the characteristics of the triad of impairments and the possible areas of skill for people with ASDs. Being medical model-based, the above diagram is less clear about the possibilities and potentials that exist for students on the AS, than it is in representing their ‘deficits’.

Individuals on the AS are all very different and have a range of intellectual ability that extends from severe cognitive impairment right up to normal or even above average intellect. Similarly, linguistic skills range from those who are completely non-verbal (and may or may not use other forms of communication) to those who display complex, grammatically correct speech. There are also a number of people on the AS who are able to express themselves orally sometimes, but not at other times. Children who are non-verbal when they start school may or may not start to use meaningful speech. Visual communication tools such as the Picture Exchange System (PECS) have been shown to support oral language development (Quill, 1997). However, children and adults do not need to use oral language in order to communicate effectively and visual communication systems enable these people to continually develop their communication fluency.

2.2.2 The AS as a Cultural Difference

The effect of the AS on a person's way of thinking is so pervasive, it is suggested that people on the AS think, act and are 'culturally different from neurotypical people' (Attwood, 2011; De Clerq, 2011; Peeters, 2011). This implies that the behaviours, actions and way of speaking for people on the AS are culturally appropriate but not necessarily understood by mainstream culture (Sinclair, 2012). This view of the effects of autism on a person is an understanding that places autism firmly in the category of a difference, like the language a person speaks (Te Reo Maori or English). In this view of autism and the AS, the impact for children on the AS on the teaching and learning in school is not so much about the diagnosis as about cultural misunderstanding and inappropriate provision. This fits better with the ecological model of

disability. In this model, “instead of focusing on what is wrong with the student, the focus is placed on acknowledging the influence of the social and physical environments of the student and making changes to these to meet the needs of the student,” (Millar & Morton, 2007, p167).

There are three types of teachers who are effective at teaching kids with Aspergers or high functioning autism; those with Aspergers or high functioning autism, those with a parent who has Aspergers or high functioning autism and those who are extremely empathetic. The first type has problems in the staffroom, but really understands the kids because they too are autistic; the second type is bilingual and the third type really enjoys the staffroom. (Attwood; 2011 speech)

Attwood’s view implies that personal knowledge and/or deep understanding of autism are the key factors to effective education of students on the AS. This type of knowledge and understanding is not text book based, but based on personal experience built up over a lifetime. This definition fits with my constructivist view of knowledge as being firmly placed in and shaped by context and experience.

Reflecting on Attwood’s speech led me into a comparison of the idea of the AS as a cultural difference versus the ASD as a triad of impairments, with a focus on how this affected my understanding of what the AS is and how it manifests. This is closely related to the difference between using a medical model versus an ecological model of disability. McDonnell (2003) and Brantlinger (2000) argue that the medical model is deficit-based and dominates educational discourse and practices. Macartney and Morton (2011) argue that where context is ignored

through the use of the medical model, support professionals and teachers can see participation as ‘irrelevant or unimportant’.

This reflection is one that has been repeated every couple of months for the last two years and my understandings have shifted as I have become more aware of myself and my place on the AS. I would now argue that having knowledge is not the same as understanding the AS. The medical model with its framework of deficits does not require understanding of how people on the AS experience their environment, whereas the ecological model with an emphasis on supports, suggests that understanding is at least useful. AS self-advocates argue that understanding of the AS is vital to the acceptance and valuing of people on the AS (Sinclair, 2012; Winter, 2012).

2.3 Inclusion

This section is a brief overview as this thesis was not focused on the pros and cons of inclusion, nor specifically on the inclusive experience for students. Instead the placement of these students in regular classrooms was taken as a given and the discourse around teaching these students was the focus. Inclusion does not have a universally accepted definition, and even when a particular definition is shared by a group of people, their interpretation of that definition can be quite different. In Northern Ireland an inclusive school used to be understood as one in which both Catholics and Protestants are educated together (personal conversations with Londonderry Ministry of Education officials in 2001). Inclusion is now more commonly

understood as the practice of educating students with special needs and/or disabilities in regular educational settings (Booth & Ainscrow, 2002).

For this research I am defining inclusion in terms of the context of this research; teaching students on the AS alongside their same or approximately same (chronological) age peers in mainstream classrooms. For inclusive education to be effective for students on the AS, it requires that these students are able to achieve socially, personally and academically in the mainstream (Fitch, 2003).

Researchers have suggested that in Aotearoa/New Zealand the exploration of inclusion has started to focus on the “social, cultural and political aspects of education in general and, in particular, the effect of these on the inclusion and exclusion of children and young people who have historically been excluded or marginalised,” (Kearney & Kane, 2006, p203). It is likely that students on the AS have traditionally been excluded or marginalised, particularly if they present with serious or challenging behavioural difficulties and/or sensory sensitivities that do not fit well with regular classroom routines.

The New Zealand Curriculum (NZC) seeks to raise the achievement levels of all students and to ensure that the quality of teaching and learning in New Zealand schools is of the highest international standard. E whai ana te Marautanga o Aotearoa kia piki nga taumata ako katoa onga äkonga, kia örite hoki nga mahi ako i roto i nga kura ki nga taumata tino tiketike o te ao whänui (Ministry of Education, 2002, p8).

As Macartney and Morton (2011) point out, the NZC details the framework and direction in relation to what knowledge, skills, and attitudes are important for teachers and schools, and how this relates to concepts of teaching and learning. The NZC is ecologically based, emphasizing learning as a “socio-cultural process of interrelationship involving the co-construction of knowledge,” (Macartney & Morton, 2011, p 4). In this socio-cultural approach, the effectiveness of inclusion and student participation is located within the social and cultural contexts within which the students are learning.

Research has been presented within the Aotearoa/New Zealand educational context looking at medical model versus ecological/socio-cultural models of disability and inclusive education (Kearney & Kane, 2006; MacArthur, 2012; Macartney & Morton, 2011). However there has been little research into the complex teaching contexts and how these affect teachers working within or towards inclusive education.

I am also aware of the need to be open to the wider sense of inclusion within my research. Not all teachers or students on the AS or not come to school with the same world view. Their families/whanau have their own cultural heritage and values as well as possibly being speakers of other languages. Inclusive classrooms need to not only respect these cultures and languages, but to be actively engaged with them (Bevan-Brown, 2006 & 2009).

It is important to see students holistically, as learning takes place within a context and not in a vacuum (Burnett, 2000). By this same token, it is important to view teaching within the local

and national educational contexts as teachers do not live in a vacuum either. They have personal views and experiences and may or may not hold them in agreement with current local and national policies. Research into the intersection of teacher attitudes, actions and their work based contexts in Aotearoa/New Zealand has been carried out in the area of Mathematics education (Higgins & Parsons, 2009), but not in the area of the education of students on the AS.

Above all, inclusion is about a philosophy of acceptance where all people are valued and treated with respect (Bevan-Brown, 2006; DePauw & Doll-Tepper, 2000; MacArthur, 2012, Macartney & Morton, 2011; Thomas, 1997; Vaughn & Schumm, 1995). Booth (2011) suggests that in order for teachers and schools to be inclusive that they need to have a value system that envisions learning without the need for ability labelling. Indeed, it is argued that inclusion is unending, so that there is no such thing as a fully inclusive school. According to this notion, all schools can continue to develop greater inclusion, whatever their current state (Sebba & Ainscow, 1996). The school that hosted my research, Canterbury Primary, was already inclusive in that it enrolled all local children whose families/whanau requested their enrolment. The school had high of numbers of children with special needs, cultures represented and made an observable effort to identify and meet learning and other needs through pastoral care and team planning meetings. This research aimed to understand teachers' perspectives about barriers to and supportive factors for effective teaching of their students on the AS.

2.4 Effective teaching and learning for students on the AS

Currently effective teaching in Aotearoa/New Zealand is evaluated by the Education Review Office/Te Tari Arotake Matauranga (ERO) during school inspections. ERO's website states that "Effective teaching is potentially the largest single school influence on student achievement." (ERO, 2011) This statement strongly suggests that, without effective teachers, students will not achieve their potential.

ERO's view (see appendix four), can be summarized with the ideas that effective teachers have high expectations for all their students, and are committed to providing a high quality education for them. Effective teachers also have comprehensive pedagogical and content knowledge and understand the learning process, treating students as individuals and responding appropriately. They also provide learning-rich programmes, building on students' prior learning and experiences in line with students' needs and interests, while differentiating the curriculum as needed and engaging learners in purposeful learning through a range of media and resources.

These teachers provide thoughtful on-going feedback and enable students to become self-managing, motivated learners who are responsible for their learning (ERO, 2011). These criteria apply to all students, whether they have ASDs or not. One of the specific indicators listed within the ERO examples of indicators of effective teaching is the use of individual education plans (IEPs).

If the teaching and learning for students with special needs and/or disabilities in the mainstream is ineffective then it would follow that this particular educational experience was of little or no

benefit to the students. For students to benefit from inclusive education, that inclusive placement needs to have effective teaching, so that effective learning can take place.

Vaughan & Schumm (1995) described the two types of possible inclusion, effective procedures and outcomes and ineffective procedures and outcomes, as responsible and irresponsible inclusion. They defined responsible inclusion as “the development of a school-based model that is student-centred and bases educational placement and services provision on each student’s needs” (Vaughan & Schumm, 1995, p.265). However, Simpson et al, (2003) thought that students on the AS will always present significant challenges to their teacher and “test even the best school programs,” (p.116).

The Ministry of Education (2006) uses the benchmarks of presence, participation and learning as criteria for effective teaching and learning. However, if a student is physically present 100% of the time, but participates for none of the time then it is unlikely that the student is learning and therefore the placement would not be effective or responsible. This indicates that participation would seem to be crucial. It therefore requires defining to ensure shared understanding. Booth & Ainscrow (2002) suggest that an alternative concept to that of special educational needs; the need for schools and teachers to remove barriers to participation and learning, aides the development of inclusive schools.

MacArthur (2011) argues that children’s rights should be at the heart of effective inclusion, which should provide not just freedom from discrimination but full participation and social belonging. The NZC supports this stance, highlighting the social nature of learning by identifying the need for students to become “confident, connected, actively involved, lifelong learners,” (Ministry of Education, 2007, p.7). I therefore chose to use the idea of physical

presence, active participation and discernible learning within the school context, as my working definition of effective teaching and learning for the students on the AS.

2.4.1 Participation

Participation appears to be self-explanatory: the idea that students participate in school, where students share in activities or tasks. “Participation means learning alongside others and collaborating with them in shared learning experiences. It requires active engagement with learning and having a say in how education is experienced. More deeply it is about being recognised, accepted and valued for oneself,” (Booth & Ainscrow, 2002, p.3).

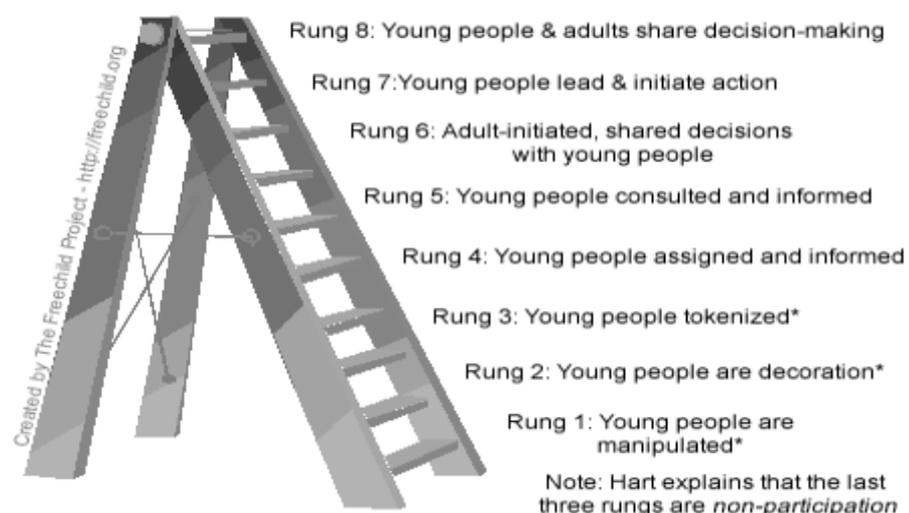
Bowen & Plimley (2008) suggest that effective participation is when teachers facilitate students to express themselves and that teachers then listen to and take into account those student views in decision making processes that affect the student’s educational experiences. Listening to and taking account of student voice implies recognition and valuing of student voice, but not necessarily recognition, acceptance or valuing of who the student is.

Other researchers have broken participation down into different forms. In social participation, the student shares in social activities within school and makes and sustains friendships and supportive social relationships (MacArthur, 2012). In emotional participation, the student is welcomed into and accepted as a valued and respected member of the class and so takes part in group and class activities within the school (Cohen, 2006). Physical participation is when a student is physically present within the school and classroom grouping. In academic participation, the student is provided with academic tasks at and just above their level to enable the student to learn, consolidate and use new skills and knowledge (Cohen, 2006).

With social, emotional, physical and academic participation, students should be able to learn. Cohen (2006) stresses that students need social, emotional and academic education in order to become life-long learners, but also to ensure mental well-being. MacArthur (2011) highlights the critical importance of social and emotional participation in the lives of students. As many young people on the AS exhibit anxiety and/or depression (Karas, Tonge, Moseley, & Reinhart, 2011), which can impact upon their lives significantly, it is important to support the development of mental well-being (Smirnoff, Pickles, Charman, Chandler, Loucas, & Baird, 2008).

However, participation is not just about the here and now, it is a skill that grows and develops, enabling students on the AS to interact with their world in ever-increasing ways. When students on the AS do not participate at all, they can be more easily ignored or viewed as extra to the class rather than part of the class (Hart, 1992). Figure 7 presents the different levels of participation, from none at the bottom, to full participation at the top.

Figure 7 – Example of Hart’s (1992) Ladder of Young People’s Participation



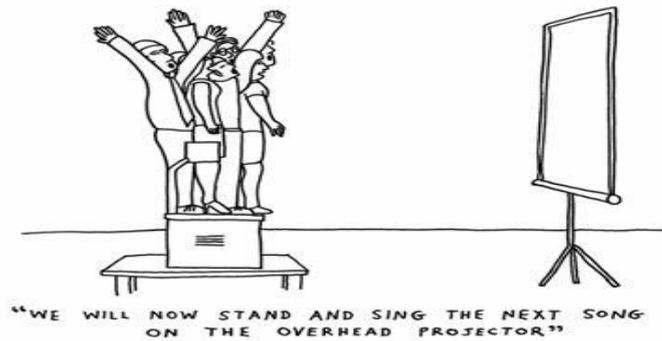
For students on the AS, participation and therefore learning relies heavily upon accessible communication. If one is unable to communicate, whether because the receiver does not understand or because the person trying to convey their thoughts/feelings or ideas does not have the means to do so, it is very difficult to participate. Without participation, students are isolated from the group and remain at best tokens (Hart, 1992).

2.5 *Communication*

Communication is by definition the “interchange of thoughts, opinions, or information by speech, writing, or signs” (Dictionary.com, 2011). This implies a shared understanding; however there may be a shared understanding by most of the class and the teacher, but not the student on the AS. This is similar to shared understandings between a teacher and class where they all share a common culture. A child coming into this class from another culture may go through a period of misunderstandings while they seek to learn the new cultural norms and expressions.

Ineffective communication is where the student on the AS does not have a shared understanding of the information or question being presented by the teacher (or other person). For example, if told it was raining cats and dogs, one of the students on the AS, Maramara, would look out of the window for the cats and dogs. A literal understanding of language is present in most people on the AS and this can create communication barriers when not acknowledged and accommodated for, as illustrated in the figure 8.

Figure 8- Misunderstanding language



(Dawn, 2010)

2.6 Teachers, the AS and Professional Development

The 2004 Final Report to the Ministry of Education on Curriculum Policy and Special Education Support suggested “that all teachers be provided with training in the notion of inclusive curriculum, including curriculum adaptation, rather than focusing exclusively on individual needs” (McMenamin, Millar, Morton, Mutch, Nutall & Tyler-Merrick, 2004, p.93). Regardless of teacher training or professional development, students on the AS have an entitlement to an education that meets their needs (Ministry of Education, 2006).

The New Zealand Autism Spectrum Disorder Guideline details expected service provision in the areas of health and education for people on the AS. The guideline is an “evidence based summary that...seeks to provide the best evidence currently available to assist informed decision making to improve the health, educational and social outcomes for individuals with ASD.” (Ministries of Health & Education, 2008, p.3).

Schools are sent huge amounts of literature every year and priorities are usually given to things related to legal requirements to implement. Wills (2006) discusses the ‘trial and error’ approach to the education of students with special needs in Aotearoa/New Zealand, in part occurring because of the many policies that are brought out over a protracted period of time. An example of this is the ASD Guideline, which has no legal requirement to be read, reviewed or implemented at any level within schools.

The guidelines place an emphasis on the need to teach students on the AS communication and literacy skills, as well as ensure the development of social skills, sensori-motor skills, cognitive development, thinking skills and self-management skills (Ministries of Health & Education, 2008). The Ministry of Education’s 2010 review of special education acknowledged that inclusive education needs improving and developed a four year plan of action to address this.

Research in the UK indicates that if inclusion is not just an empty slogan it will require an effort. People with autism and Asperger syndrome have strengths and can make useful contributions to society. However, they also have special needs that require adjustments from those around them. Such individuals may function in the mainstream but only with careful attention to their needs. Some may be easily distracted, have poor concentration, be anxious or confused, suffer 'overload' of information or sensory stimulation or be unable to interpret subtle academic or social rules. It is here that environmental modification and training of professionals are an essential prerequisite for success. (Barnard, Prior & Potter, 2000, p.12)

A classroom provides a student with a group of peers, amongst whom they ‘belong’. However, this sense of belonging relies upon the group being inclusive of diversity, and having a sense of ‘us’ that is inclusive of, among other things, multiple ethnic heritages, ability and disability. The sense of ‘us’ and ‘not us/different’ that can be signalled through body language and other

forms of communication enables social and academic exclusion in school through the exclusion of one or more students from the wider group (Alton-Lee, 2003; Johnstone, 1987).

Exclusions that inhibit student learning and undermine student identity can occur when, ostensibly through their special needs, some students are ‘othered’ and classified as ‘not like us’. Rietveld’s research in New Zealand classrooms (1994; 1999) documents contrasting examples of inclusion and exclusion for students with Down Syndrome (Alton-Lee 2003, p.36).

Rietveld (1999) linked many teacher practices which resulted in the exclusion of students with special needs to teachers holding a ‘personal tragedy model of disability’ rather than viewing students as individuals who are at school to learn. Alton-Lee (2003) hypothesized that although resultant interactions between such teachers and students with special needs are well-intentioned they can deny dignity, respect and educational opportunities to students.

To be effective and inclusive the concept of classroom or other grouping as a learning community needs to move away from distinctions between the ‘mainstream’ and the ‘included other.’ Instead, difference and diversity need to become central to our concept of community (MacArthur, 2011; Macartney & Morton, 2012). The shift in thinking required of teachers has been identified “as a universalizing discourse of difference, within which programmes are designed to meet the diverse and fluid educational needs of all students” (Alton-Lee 2003 p.36). As thinking and attitude inform language and teaching practices, such a shift would create environments that are inclusive of diverse learners.

Research has suggested that constructivists can oversimplify the role of teachers; “constructivists can sometimes see the teacher’s role as one of simply assisting performance and the construction of powerful knowledge rather than explicitly teaching” (Harris & Graham,

1996, p.27). I suspected that teachers need to explicitly teach concepts and skills in order to be effective teachers of students on the AS (Attwood, 2011; De Clerq, 2011; Peeters, 2011), in both the formal and informal curriculum.

2.7 The Construction of the AS as a Disability or a Difference

Slee (2011) suggests that most current research around attitudes towards disability is decoupled from context. Although this research is not specifically aiming to examine teacher attitudes around autism, these attitudes are part of the data collected and within context can provide insight into what teachers perceive as difficult in terms of facilitating learning for students on the AS.

In line with De Clerq (2011) and Peeters (2011), I view the idea that ASD is a disability as a social construct to frame ‘others’ who are unable to, or struggle to fit into the socio-culturally constructed ‘normal/average’ way of moving, seeing, hearing, communicating and or thinking. Disability studies and inclusive education researchers use an ecological model or constructivist framework for detailing how the interaction of impairments/differences and contexts create disabilities and exclusions (Morton, 2011; Sullivan, 2011). These models are important within the context of the values within education and how these affect students who may be outside of prevailing norms.

The current organization of education has consequences. Some pupils are smiled upon, actually and metaphorically. They enrol without fuss; they find that the culture and organization of the classroom and what they are learning complement the culture and disposition of family life, (Slee, 2011, p.42)

For some students their differences impact on enrolment and then on acceptance, understanding and educational experience. I have personal experiences of the negative social impact of difference, for both myself and my family. The two key aspects to my framework are the terms ‘neurotypical’ in respect to people not on the AS, used in many narratives written by adults with Aspergers, which implies neuro-different rather than neuro-disabled, and the idea that was put to me by a young man I taught in the 1990s; that a person is not inherently disabled, though they are different. People with differences can and do, do things, but other people/society has barriers in place which then disable that person.

Research has indicated that university professors who viewed “students with disabilities from a conventional, deficit perspective feel ill-equipped to provide necessary accommodations. Professors who hold a social constructivist view of disabilities view all learners, including those with identified needs, on a continuum and see accommodations for special learners as being an extension of their good teaching” (Ginsberg & Schulte, 2008, p.84).

As discussed, a medical model or deficit perspective held by a teacher would suggest that difficulties faced by a student on the AS are inherent in that student. This internal placement of ‘deficit’ or need within a student can displace notions of potential and success. This “allows teachers to attribute ‘problems’ to the individual without considering the limitations and effects of particular teacher practises and decisions,” (Macartney & Morton, 2011, p9). For example, a

non-verbal student on the AS, seen as disabled, may be envisaged as not having the potential to ever communicate effectively. This could be compounded as a disabling factor if the teacher is unable to communicate using PECS, photo cards or any other form of alternative communication.

In contrast, a social model of disability would hold this same student as being on a continuum of learners. The social model of disability, developed by Oliver (1983) moved the focus away from impaired individuals having inherent impairments, towards a focus on the restrictive environments and disabling barriers that disabled individuals. In the educational context the social model ‘shifts the focus from changing disabled students to understanding the school contexts in which children and young people learn,’ (MacArthur, 2012, p5).

In the previous example of a non-verbal student the social model would stress the need to identify and implement system of communication to support the development of that students’ effective communication may be, for example by a teacher learning to use a communication system alongside the student, possibly even teaching the whole class how to use the system. Even if the student on the AS learns the system slowly and is not fluent in their communication, they will be able to communicate with the teacher and hopefully even the whole class.

In Natalia and Gabriel’s (2006) artwork shown in figure 9, they specifically reframed AS from a deficit to a socially constructed difference. They are able to do this because painting is a culturally accepted to be an activity that is usually done in a solitary manner, whereas play is seen as a culturally social activity.

Figure 9 – AS as a disability or a difference



(Natalia & Gabriel, 2006)

A social constructivist perspective, such as Slee's (2011) idea of disability as an oppressive and normative construct, would suggest that an understanding of the neuro-differences and the barriers in place that are creating dis-ability for students on the AS is critical to challenging that construct. If this understanding is not there, it needs to be collaboratively explored, possibly as a precursor to change in actual teaching or the teaching environment. This understanding also informs the basis of the noticing any changes that may take place in individual teachers. For example, if I find data suggesting that participation in classes that are noisy is extremely difficult for students on the AS, then changes to look out for would be: an understanding of this by teachers and/or the implementation of strategies to minimize the amount and frequency of noise the students on the AS are exposed to.

Learning about neuro-difference and neuro-typicalities may bring about some surprising discoveries for teachers, researchers and students. For example, while listening to Tony Attwood talk about the differences between how females and males present with and live with

Aspergers, I realized that when Attwood (2011) was describing females with Aspergers, I matched the thinking, acting and doing style that he was detailing. Prior to this, I had always presumed I thought in a neuro-typical way, because the way I think is typical for me. With an understanding of how people think and process information, both NT and AS, teachers will be able to present learning opportunities for students that involve each of the different thinking and processing styles.

A key aspect of this way of thinking about AS as a disability or as being an aspect of being an individual is that the teacher doing the thinking can reflect on what it is that they are constructing through that way of thinking. Most people think that they are normal and that the life they live is normal, because their normality is their self and their life. In a deficit model, the person with a deficit can be defined in terms of others and in terms of what they can't do, rather than what they could do (Happe, 1999).

De Clerq (2011) suggests that schools need to start by looking at the possibilities for a child with autism, instead of focusing on the deficits. Teachers need to 'accept neuro-diversity' and look at what the child on the AS requires in order experience education positively. Lord (2011) stressed her findings that 'People on the AS are first and foremost people'. Table 1 summarises the construction of the AS, as either a disability or an aspect of individuality and the implications of this.

Table 1 – The construction of AS as a disability or an aspect of individuality

	AS as a disability (medical model)	AS as an aspect of individuality
How this view constructs the person with ASD	Disabled, less able than others, reliant on others, more needs than others. Person is intrinsically unable to do some things (ever), probably below peers academically.	A person on the AS, a person who thinks ‘outside the box’, a person who may not yet have learnt social and emotional skills. Person is somewhat different from peers in communication, social and emotional areas. May or may not be below peers academically.
What this means for the teacher	Teacher needs to remediate for deficits that can be moderated. Student needs to ‘fit in’ as best as they can.	Teachers needs to learn how person thinks, says and does in order to communicate effectively. Student can be ‘self’.
Implication for the rest of the class	Peers can feel pity for the person on the AS, they can pick up the deficit model viewpoint.	Peers can learn that people are all different and that differences are valued.
Implication for whanau/family of person with ASD	Can become seen as a disabled whanau/ family. Can be treated differently from other whanau/ families. Can feel resented or unwelcomed.	Can be seen as a family who happen to have a child (young or adult) on the AS. Can feel accepted and supported.

Table 1 represents a summary of the wider implications for students on the AS being viewed as disabled through the lens of the medical model, in contrast with the implications for these same students being viewed as part of a continuum of diversity. Seeing difference/disability as a continuum that encompasses all human abilities encourages teachers to see students as individuals, rather than as representations of their labels or diagnoses (Macartney & Morton, 2011).

2.7.1 The Deficit Model and the AS

The deficit model says that things/skills are missing and the job of other people is to remediate for these deficits (Happe, 1999). Funding for students in Aotearoa/New Zealand requiring special education support is based on proving the student has ongoing deficits either across all areas, or in a range of specific areas (Ministry of Education, 2011). The idea that a deficit is ongoing implies that the deficit is intrinsic to the student, and, even though progress can be made with support, the student will always have an intrinsic deficit (Happe, 1999).

In the case of special needs education the deficit model can lead to educators feeling that children cannot achieve in any recognisable sense, especially in the context of national standards, “which are standards, in regard to matters such as literacy and numeracy, that are applicable to all students of a particular age or in a particular year of schooling.” (Education (National Standards) Amendment Act 2008).

Some teachers have socially constructed beliefs, based on deficit models, about a range of children they teach. For example, in a recent conversation with a number of teachers (2009), it appeared the teachers believed it was much easier for children from higher socio-economic homes to develop academically at school. “School personnel were always ready to blame the students' home contexts but seldom examined the school context” (Harry, & Klinger, 2007, p.18).

Another angle to a deficit model was provided by Dr Pita Sharples (2009), who was widely quoted in the Aotearoa/New Zealand media as stating that university access should be opened up universally for Maori, because part of the reason they did not succeed as a group at school,

was their socio-economic disadvantage. He felt that this could be remedied by open access to university. No matter which side of the argument one positions oneself, one can say that this is a deficit model approach.

Exclusionary discourses include a theme of disability as difference, whereby disabled children are considered not to be the responsibility of ordinary early childhood educators or services. Inclusionary discourses, on the other hand, have as a central theme the 'humanness' of disabled children (Purdue, Ballard, & MacArthur, 2001, p.37).

When applied to the AS, the deficit model can be useful in supporting explanations of what people on the AS find difficult, but it does not provide an effective way to understand the presentation of an AS. However, "deficit accounts of autism fail to explain why people with autism show not only preserved but also superior skills in certain areas" (Happé, 1999, p217). Current theories, suggest that at the heart of the AS lies a difference in the mind or brain, and not merely a deficit in comparison to neurotypical people (Attwood, 2011; De Clerq 2011; Peeters 2011,).

Difference can be a neutral term, where the difference could be interpreted as positive or negative, deficit however is pejorative, implying that the person with the deficit is without something, that they lack qualities which would make them whole (De Clerq, 2011). Even when students on the AS have difficulties with communication to the point that they have no meaningful speech, they are often able to communicate with family/whanau quite well, which can be overlooked by professionals (Macartney, 2011).

Human development is not a neat and orderly affair. Every individual has his or her own unique rate and pattern of development, every individual has his or her own unique learning style, and every individual has his or her own unique collection of personality and behavioural characteristics. Like snowflakes, sunsets, and other miracles of nature, no two human beings are ever exactly alike (Meyerhof, 2004, p8).

The diagnosis of AS, using the DSM-IV or the ICD-10, is deficit model based. However, it would be very difficult to find two people on the AS that are the same or even very similar in their presentation (Attwood 2011; De Clerq 2011). Brain scan research is validating the theory that the brains of people on the AS are different to those of neurotypical people (Ecker, Marquand, Mourão-Miranda, Johnston, Daly, Brammer, & Murphy, 2010).

It has been suggested that teacher attitude towards disability and inclusion is an important factor in the success of inclusion (Cook & Tankersley, 2000). Teachers holding traditional medical model views on disability may be looking out for deficits in need of remediation rather than thinking about how they can teach in a way that will enable the student to learn (Dudley-Marling, 2004).

In contrast, the constructivist point of view suggests that disabilities are not inherently fixed in people, but instead arise from interactions between people and their environment. This perspective suggests that learning and learning problems are rooted within the context of human interactions and relationships (Dudley-Marling, 2004). The ‘Asperger for freedom’ website summarises that; “Many problems associated with autism are caused, or worsened, by prejudice.” (<http://www.aspiesforfreedom.com/>, 2011)

Ginsberg and Schulte indicated that inherent in the constructivist perspective is the view of the student with special learning needs as one who may have more unique or extreme needs than the average learner, but whose needs are related to those other students have as well. In other words, they are not separate and apart from a body of learners, but perhaps some of their needs represent a farther point on the continuum of needs all learners have. In some learning scenarios, they may be as successful as or more successful than other classroom learners. They are not a deficient learner at all times, rather their abilities, performance and learning will change with alterations in tasks, environments, and teachers. (2008, p.85)

In a constructivist view disability is not a fixed entity that defines the person, but is dynamic and fluctuating. This is particularly relevant when talking about students on the AS, as sensory sensitivities, special interests and communication skills for many people on the AS fluctuate not only over time but also with context/environment (De Clerq, 2011).

Cook (2003) indicated that teacher attitudes have not been empirically shown to increase teacher efficacy in the teaching of students with disabilities. In contrast Keuster (2000) claimed that in education, “teacher acceptance of, and attitude towards individuals with a disability are perhaps the most important variables in determining their success” (p.2). Gregor and Campbell (2001) found that unless mainstream teachers believed that the class would not be disadvantaged by the presence of a student on the AS and that the student themselves would benefit from being in their class, they were not able to successfully implement the national inclusion policy for these students.

I aimed to investigate whether the teachers’ attitudes towards the AS affected the effectiveness of and willingness to teach students on the AS. Scruggs and Mastopieri (1996) reported a

significant number of teachers felt unwilling or unable to meet the needs of students who they felt had significant disabilities. As evidenced by the teachers' reported initial understandings, children on the AS are often perceived by teachers to have emotional and behavioural difficulties in addition to learning and sensory difficulties, and thus may be viewed as having complex or significant disabilities. I thought that this may be one of the factors affecting teacher willingness towards and effectiveness in implementing the curriculum for students on the AS.

Kalyva, Gojkovic and Tsakiris (2007) indicated that positive teacher attitudes were closely related to being motivated or willing to provide extra time and planning for their students with special educational needs. In addition, students on the AS are each unique, rather than conforming to a pattern of behaviour similar to one another, but different from 'neuro-typicals' (Attwood, 2011). This can lead to a difficulty in generalising teaching and learning techniques from one student on the AS to another for individual teachers.

“When you have met one person with autism, you have met one person with autism”

(common quote repeated by a number of speakers at APAC 2011).

The AS is a 'spectrum of differences', it is perceived that there are more differences between non-verbal people with classic autism and people with Aspergers than there are similarities (Attwood, 2011). This can make it difficult for teachers to plan how to meet the 'possible needs' of students on the AS. However, when one has an understanding of what the autistic

experience is and how this can affect people's interactions with self, others and the environment, then one can begin to generalise. This knowledge can conversely also help teachers to specify teaching and learning techniques for students on the AS (De Clerq, 2011).

In contrast, merely identifying deficits associated with the AS does not enable the generalisation of teaching techniques. For example, identifying difficulty in understanding the big picture does not help teachers unless they also understand that people on the AS are very good at detail-focussed processing (Happe, 1999). Effective teaching of students on the AS requires teachers to see potential in these students and to teach to that potential (De Clerq, 2011).

2.8 National Changes to Education

There have been some significant national changes to education in Aotearoa/New Zealand, over the period of this research. These changes affected the teachers themselves as well as the school, the community and the nation. Change from within a culture and change imposed from outside both affect and are effected differently (Patterson & Patterson, 2001). When change is imposed the people upon whom it is imposed can be accepting or not and the degree to which they accept or not can vary dramatically.

Three of the changes that observably affected the teachers involved in this research are detailed in the following sections. Two of these are changes directly related to the New Zealand educational context and the third a major event that affected all people within the Canterbury

region of New Zealand, where the school being studied is based. These changes are discussed as they directly affected the teachers and their teaching context during the 2010 school year. These changes affected what and how the teachers taught, as well as, in some instances, who they taught.

2.9 Changes to assessment and reporting of student achievement

The 2010 introduction of National Standards changed the ethos of primary education assessment and reporting of student achievement in Aotearoa/New Zealand. It was a change from a clear focus on the National Curriculum framework, in which schools needed to provide a learning framework that met the needs of their community (Ministry of Education, 2007) to one of testing and focusing on literacy and numeracy. This is similar to the American ‘No child left behind’ policy and the British national standards framework.

This is important in this thesis because of the emphasis I am placing on the teachers’ voices being interpreted within their context. Benjamin (2002) and Slee (2011) have identified that the UK’s national standards increased barriers to learning for non-typical students. In light of this it seemed likely that National Standards in New Zealand could have a similar impact on the students in this research. Underwood (2008) asserts that this negative impact is due to the stress on academic achievement, which encourages parents and teachers to find that student failure is due to internal difficulties within the child. In turn that categorising these difficulties as disabilities can be problematic or helpful depending upon contextual factors. “The practises of teachers and parents, informed by their beliefs about barriers to learning, either support of

detract from the goal of including students and supporting students to maximise their potential,” (Underwood, 2008, p.3).

Prior to this, the last previous major change was to the 1992 outcomes-based National Curriculum, which was replaced with an updated version in 2007, following almost a year of consultation and feedback. The 2007 National Curriculum provides a “framework for teaching and learning; a framework designed to ensure that all young New Zealanders are equipped with the knowledge, competencies, and values they will need to be successful citizens in the twenty-first century” (Ministry of Education, 2007, p.4). This 2007 curriculum was not purely outcomes-based, but emphasised that how children learn is as much part of the curriculum as what they learn. The framework is summarised by the figure 10, on the following page.

Figure 10 – The 2007 National Curriculum Overview



<http://nzcurriculum.tki.org.nz/Curriculum-documents/The-New-Zealand-Curriculum>

The introduction of national standards moved the focal point of New Zealand’s education system away from the whole of the national curriculum and onto the accountability of schools with regards to the academic outcomes of the literacy and numeracy sections of the curriculum. The rationale behind the introduction of national standards was twofold. First, it was an

election promise made in 2008; second, it aimed to combat the ‘tail of under-achievement’ in New Zealand education, talked about by the 2008-2011 National-led government. This ‘tail’ is the percentage of students who leave school with few or no qualifications.

Many teachers, schools, and educational experts in New Zealand felt that national standards were such a big change to the educational system that they should be trialled before being introduced (as reported on TVNZ news, local and regional newspapers, 2010). The Ministry of Education responded by putting in place monitoring of national standards for three years. The key issue of disagreement between the government/Ministry of Education and schools/teachers/unions is whether or not national standards would do anything to raise student achievement (New Zealand Educational Institute, 2010).

As Patterson and Patterson (2001) suggested; the teacher perception that outsider-imposed change would not improve outcomes for students influenced the level of teacher resentment regarding those changes. In this research the school was not implementing national standards (illegally) and so teacher resentment was with regard to the idea rather than the actuality. However, this resentment was apparent in regards to the school’s own system of assessment, which had been modified significantly to include attainment targets. These targets were similar to national standards but imposed within the school rather than from outside.

The language teachers and schools are encouraged to use when reporting to parents about their child’s achievements in relation to the national standards was initially prescriptive and pejorative; ‘above, at or below standard’. Teachers in this research expressed the view that labelling students as ‘below standard’ at five years old, was not helpful or best practice.

Previously many schools used the phrase ‘working towards’ for students who had still not attained the level being assessed.

Schools are required to use plain language in their reporting and clearly show your child’s progress and achievement in reading, writing and maths, in relation to National Standards. The report should tell you if your child is working at the expected level for their age, or if they are working at a level above or below the expected standard. (Ministry of Education, 2010)

Canterbury Primary, along with many other schools, initially refused to implement national standards. However, at the time of writing, they have now implemented national standards fully. Their initial rationale was that the current regime of evaluation, assessment and reporting identified which students needed extra support and gave parents a clear picture of their child’s progress. However, the national standards still influenced this research as Canterbury Primary required a higher level of evaluation, assessment and reporting than in previous years, and it had added in school attainment targets.

These school attainment/achievement targets required teachers to (try to) ensure that 75% of students in the class are able to work at the desired level in mathematics and literacy. These levels were set by the principal but related to the levels of the national curriculum and the age of the students. Prior to this there was a stronger focus on the key competencies for individual students and progress was measured across both academic curriculum and key competencies via a range of formal and informal assessment. This shift in focus affected what teachers were required to include in their planning and teaching and could be put into the rules section of the activity theory framework.

2.9.1 The Commoditization of Education

In New Zealand some early childhood education (ECE) services are subsidized by the state to ensure these services are available to all families. The drive to commoditize education in New Zealand can be illustrated by the 2009 national policy shift from the required targets of 100% of staff in ECE centres being qualified and registered teachers by the year 2012, down to a target of 80% staff for children over two years being registered teachers, with only 50% of staff needing to be registered teachers for children under two. Unions and educationalists have argued that dollar efficiency has become more important than quality in pre-school education (New Zealand Educational Institute, 2010a).

An alternative view on this issue is that ECE does not require qualified teachers as it is not a job that needs training. Government Ministers were frequently quoted in the media and by Education unions as saying that not all ECE teachers need to be qualified. Carr and Mitchell (2010) reported that the “Prime Minister has said that “it is a matter of personal belief as to whether a high proportion of all centre staff should be trained teachers”.” They went on to argue that, “this is not so. It is a matter of an informed and evidence-based educational decision. These questions would never be raised about the adults who teach 5- and 6- (or older) year-olds in school.”

A link between ECE staff not needing to be trained or qualified teachers can be made with the current situation of requiring mainstream teachers to teach students with special educational needs without requiring teacher education to provide any training in this area. Training is expensive in terms of teacher time required and payment for the training provider.

ECE is mainly a for-profit enterprise in New Zealand and therefore needs to make a profit. This is in line with all for-profit enterprises and should not rule out having high quality teaching and learning, as happens in most for-profit private schools. However, the recent economic recession with increasing power and building costs, has meant that reducing staff costs and/or raising fees would seem to be viable options to improve the profit/loss accounts of ECE centres.

Teaching unions argued strongly that ECE should not be purely a commodity, that the benefits to society and children of quality early childhood experiences should outweigh the need to provide ECE as cheaply as possible. This argument can also be used in evaluating the benefits of having teachers with specialist training and qualifications to teach a diverse student population versus the need to provide teachers as cheaply as possible. In Aotearoa/New Zealand teachers who had Master's degree qualifications in any relevant area of education are paid higher than teachers with Bachelor's degrees.

All licensed ECE facilities are required to implement the New Zealand national ECE curriculum, *Te Whariki*. *Te Whariki* is described as a bicultural curriculum and is designed to be inclusive and appropriate for all children including children with special needs, (Grant, 2011, p6).

However, as most ECE centres are for-profit, parents can find that their children on the AS or other special needs are not able to access places, particularly if the child presents with observable challenging behaviour. An IHC submission about discrimination towards students with disabilities suggested that some early childhood education or childcare centres actively discourage families with disabled children from enrolling in their service, with centres suggesting that this is because they do not have the financial or staffing resources to meet the needs of children with disabilities (IHC, 2011). Again, this represents the commoditization of

education as, for ECE centres, the perceived and actual extra costs of meeting the needs of students with disabilities can affect the level of profit/loss for a centre and so centres might be discouraged from accepting these children.

Where ECE centres are not-for-profit but rely on a higher percentage of untrained staff and/or volunteers, the centres can find that they lack the skills to understand and support children with needs. “What goes on in the early education and childcare environment is critical to children’s learning and social participation outcomes. Too often parents are concerned that all that is being provided for their child with an intellectual disability is a babysitting service” (IHC, 2011, p.6).

Figure 11 – Children are the most important investment



NZEI (2010a)

During July 2011, the Aotearoa/New Zealand government was publicly consulting on the ECE taskforce report, including changing funding to a voucher-based system. Vouchers place a clear dollar value on education and are another example of commoditization. Going further is the December, 2011 announcement of the introduction of charter schools in Aotearoa/New Zealand, where public funds are given to private enterprise to run schools. This policy was

renamed in 2012 and is still going through the political process needed before this type of school can be introduced.

2.9.2 The Canterbury September 4th 2010 Earthquake

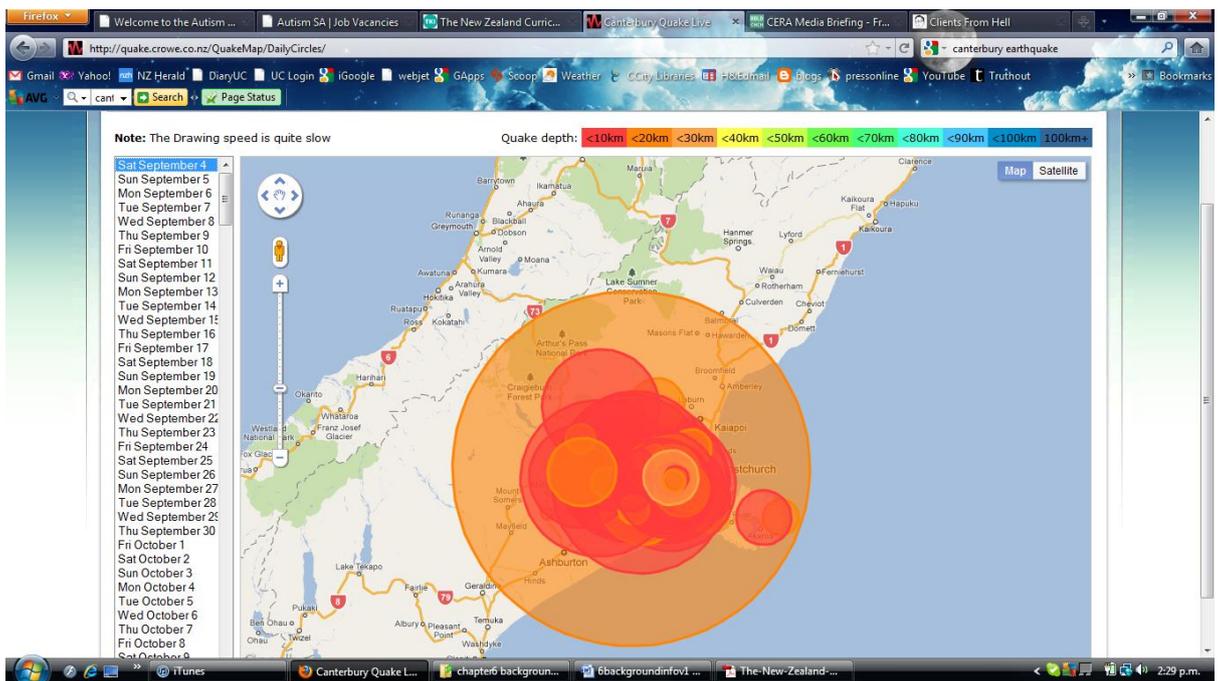
Canterbury lies over several fault lines and earthquakes are to be expected, with hundreds occurring each year that are barely noticed. On 4th September 2010 a 7.1 magnitude earthquake, struck Canterbury in the South Island of New Zealand at 4:35 am local time. It was the first in a series of significant earthquakes that are still occurring over two years later. However, aftershocks continued to have an effect on staff, students, myself and the wider community.

Many people suffered from interrupted sleeping patterns, stress and anxiety (Sullivan & Wong, 2011). This got worse as the aftershocks continued to rock Canterbury. There have currently been over 10000 aftershocks, with over 5000 homes needed to be demolished and the land being too damaged to rebuild on. The central business district had a third of its buildings demolished, after over a hundred people died during the February 22nd 2011 Canterbury earthquake.

Once the school was reopened in September 2010, the focus for the first few days was on teaching all the students in school what to do in an earthquake (make like a turtle) and make the visual prompts for this. I suspended observations briefly as I was asked to ensure that all the special needs students could understand and follow the earthquake drill instructions. After this I returned to my research observations.

Figure 12 from <http://quake.crowe.co.nz/QuakeMap/DailyCircles/> shows the affected area of the South Island. The large number of circles over central Canterbury including the wider Christchurch area indicates the number of earthquakes, the diameter represents the energy and the colour/shade the depth. As the diagram shows, there was not just one earthquake, but multiple events.

Figure 12 – The September 4th 2010 Canterbury Earthquakes



The February 22nd 2011 earthquake caused widespread damage and interrupted ‘normal’ life for many Cantabrians. All local schools were closed until the buildings were checked for structural integrity and for whether they had power, water and functioning sewage systems. Teachers and students at Canterbury Primary were affected in a variety of ways.

Many teachers at Canterbury Primary had damaged homes or lack of water/sewage in their homes. Some students (none in this study) lived in emergency shelters for a few weeks. A large aftershock occurred during the senior students’ sports day, with the ground rippling visibly and

classrooms shaking and rattling. The students seemed to be overwhelmingly interested in the visual effects of the earthquake, whereas the teachers mostly reacted emotionally (personal observations, 2010).

For the students involved in this research, September onwards was particularly stressful as they struggled to come to terms with the idea that their homes may or may not fall down in another aftershock. The teachers and I ensured that all the students with special needs had safety strategies modelled physically, verbally and visually. Each class had earthquake drills and, where students on the AS were struggling to follow these, I provided extra support to those students.

Decisions about schools closing and opening were made by the Minister of Education in conjunction with local Ministry staff and school managements. Canterbury Primary had little damage other than things falling off shelves, etc. and robust procedures and communication ensured families felt safe sending their children to school (personal observations, 2010).

As a contextual note, Canterbury Primary sent a number of staff members to Greymouth and other West Coast towns and villages to support schools following the Pike River Coal Mining tragedy (November 2010) where 29 miners and contractors lost their lives. New Zealand's education system has an inbuilt mechanism for supporting schools, staff and students after serious events. This system ensured that staff that needed time off during the earthquakes were able to have that time and so could return to school fully focused on caring for their students.

However, the ongoing nature of the Canterbury earthquake aftershocks translated into increased stress and tiredness for both staff and students. This meant that all observations undertaken

between September 4th 2010 and the end of the school year had an underlying tension between effective teaching and tiredness/stress/distress for teacher and/or students and/or myself.

2.10 Thesis focus and research questions

This focus of this thesis is the perceptions of teachers about the effects on the complex teaching context on their choices about how to teach students on the AS. Booth & Ainscrow (2002) suggest that positive educational experiences for students on the AS require the teachers understanding, acceptance and valuing of these students and their provision of educational opportunities that met these students learning needs.

The research questions were;

- a. What contextual factors, external to the teachers such as national and school policies, are implicated in the ability of teachers to be effective in their teaching of students on the AS?
- b. Do contextual factors that are internal to the teachers, such as attitudes, energy and prior knowledge or understanding of autism have an impact on teacher effectiveness in their teaching of students on the AS? If so, what are the key internal contextual factors and why do they have such an impact?
- c. Is it possible to increase the effectiveness of teachers in relation to the teaching of students on the AS? If so, how?

As mentioned previously I defined effective teaching as resulting in the physical presence, active participation and discernible learning of the students on the AS within the school

context. In asking these questions I hoped to be able to answer my main question of why some teachers are more effective at teaching their students on the AS than others. I felt that if contextual factors that could have an impact on their teaching were identified by teachers I could compare these self-identified factors with observed teaching interactions. These comparisons could lead to possible explanations for the negative or positive effects on teaching by particular contextual factors as experienced by these teachers.

In the following chapters I detail the research design and implementation. The activity theory framework used to analyse the data will be further introduced, with more information about this framework and how it supported this complex context, school-based research project.

3. Chapter 3 - Methodology

I was interested to understand why teaching and learning was more successful in some situations than in others for teachers and their students on the AS. Allan and Slee (2008) point out that how educators understand and respond to difference in the classroom is an issue of longstanding existence, but one that is also of current importance. When starting out on this journey, my long term aim was to improve educational experiences for students on the AS, hoping to discover strategies teachers use where these students are able to learn in ways that develop potential and minimise anxiety. I did not have a clear picture of what that looked like in reality nor how it could be achieved, just that it should be possible.

“The research methods we choose say something about our views on what qualifies as valuable knowledge and our perspective on the nature of reality” (Glesne & Peshkin, 1992, p.5). I was interested in the exploration of real behaviour and conversations in complex settings without the need to simplify social phenomena, seeking to identify and understand some of that complexity. Glesne & Peshkin, (1992) suggest that this is the nature of qualitative research, aiming to gain insights rather than find definitive answers. Qualitative research allows for multiple realities to be presented and explored as there is an understanding that people can learn about and know things in many different ways (Lichtman, 2006).

Lichtman (2006) notes that most educational researchers have studied children that are quite different from themselves and those large differences could lead to ethnocentric interpretations. In this research I am both similar to the other teachers, in that I am a colleague, and the students we are discussing, in that I too am on the AS. I aimed to be non-judgmental from the outset. I found that being an insider who was able to go into the classrooms for a whole year the large

number of conversations and observations led to a broad and deep appreciation for the work of the teachers and a growing awareness of how different AS thinking is from non-AS thinking. I hope that these factors were able to override any moral judgements that may have otherwise arisen.

Lichtman (2006) postulates that no matter the methods or methodology all qualitative research is inductive and iterative. As I engaged in the research, I found that my planned methods changed to be more responsive to the comments and questions from the other teachers in our conversations. The observations became background data for me to check my reflections and interpretations against, as well as being starting points for conversations.

I used a multi-case study approach (Lichtman, 2006), treating each teacher as an individual case initially and then combining my data and interpretations to compare and contrast core issues raised by the teachers themselves. Additionally, due to my specific interest in teacher attitudes and perceived willingness towards teaching students on the AS I also sifted and sorted data for these elements too. My interest in this area led to the final choice of what to include in this thesis as I found many but not all of the core teacher issues related back to and influenced their attitudes and willingness as evidenced by the teacher stories and observed behaviours. During the writing of this thesis I kept returning to the data gathered to select supporting evidence in the form of quotations from the teachers and interspersed these with my generalised interpretations and brief but detailed contextual information as suggested by Chenail (1995).

The idea of research as disinterested and objective is difficult to reconcile with qualitative research as we “receive and interpret the world in ways that are shaped by our individual biography and, naturally enough, have strong views about what a better world looks like,”

(Allan & Slee, 2008, p.11). This study was concerned with teachers' thoughts and conversational responses to issues within the classroom, which I felt I would interpret best if I had also observed the settings about which these conversations were based. "Qualitative researchers go to the particular setting under study because they are concerned with context. They feel that action can be best understood when it is observed in the setting in which it occurs," (Bogdan & Biklen, 1992, p.4). I felt that it was important to obtain as much detailed conversational data as possible from the teachers and thought this would be more likely if they viewed me as a colleague and not an outsider, with whom they may be more guarded.

To frame my data within the actual context of the day to day reality of teachers, I chose to undertake participant research. I felt that this should enable me to give and receive comments within the contextual framework within which the teachers worked in a series of case studies. These case studies used a social constructivist framework, which expected each teacher, myself included to have prior knowledge and experiences and that we would create new knowledge and experiences in our interactions with each other and the students.

I utilised mediation tables based on Activity Theory to help me organise the data that came out of my conversations with and observations of each teacher. In this chapter, both social constructivism and activity theory (Vygotsky, 1979 & 1986; Engeström, 1987) will be introduced, along with a link between activity theory and social constructivism. I will explain how I used activity theory as a philosophical framework to analyse data and collate findings that I had collected using social constructivist theories about individual's truth and knowledge.

Researchers have used Activity Theory in the analysis of the educational provision for young people with emotional and behavioural difficulties (Daniels & Cole, 2010), though not

specifically in the area of autism or to investigate why provision varied in terms of teacher willingness or ability to meet student needs. Daniels and Cole (2010) found it a useful aid to analysis that facilitated wider understanding in a complex context. Therefore even though Activity Theory had not previously been used in this exact field of study, I felt that it would be useful because of the complex context which was being investigated.

Additionally, Activity Theory doesn't ask the researcher to stand outside the process, it can acknowledge the researcher as inside the process (Nardi, 1996), which was relevant as I was collaborating with the teachers in their journey to try and meet the needs of their autistic students. Within my dual role as ORs teacher and researcher, sometimes the actions of one role were blurred into another as I sought to listen and respond to teachers and observe and discuss their interactions with particular students.

My personal constructions of knowledge and understanding of the data changed over time along with the exploration and analysis of the data (Goodall, 2011a). My evolving understandings acted as a filter through which I observed the teachers and students and interpreted the conversations with the teachers. From both the social constructionist (Burr, 2003), and the social constructivist viewpoint which shaped this research and the analysis of the data, there is no such thing as a detached, neutral observer (Wilson, 2000).

Bogdan & Biklen (1992) suggest that interviewing is a better approach than observation when studying a number of individuals who have a commonality but are not part of a group. In this case all the teachers worked in separate rooms and could not have been observed en masse, and the core data being collected was from unstructured interviews/conversations, which followed on from observations. In this case, data collection was meant to be semi-structured interviews

in order to ensure that I discussed aspects of interactions that I had just observed, however, it became much more of an organic process, with a small social catch up at the beginning – an offer of coffee for the teacher which I would make whilst they finished things up, and then a chat about how the teacher was in general. Then the conversation would evolve, though I always tried to ensure we discussed one or two particular things that I had noticed during my observation or issues that the teacher wanted to raise.

This organic process reflected the idea that qualitative inquiry enables the exploration of real behaviour in complex settings without the need to simplify social phenomena, instead seeking to identify and understand some of that complexity (Glesne & Peshkin, 1992). I realised that in trying to have semi-structured interviews I was seeking to simplify the observed social phenomena instead of delving deeper into issues that teachers raised, which would help to illuminate some of the complexity involved in trying to meet the needs of students on the AS.

This research aims to let the teachers involved speak for themselves through quotes and descriptions of our interactions, rather than objectifying them. Qualitative research aims to put forward a descriptive account and interpretation of an aspect of how humans live, interact and/or communicate (Lichtman, 2006). It was at times difficult not to ascribe meanings to teacher comments without seeking clarification or letting the comments stand alone. I struggled with the idea of interpretation by myself and others should comments stand alone without enough contextual information and how much explanation of observed or spoken context was enough.

“So much of qualitative research depends on what people have to say. After all, we come to understand people by listening to them, watching them interact, and thinking about the meaning

beyond, beneath and around the words,” (Lichtman, 2006, p.32). As a researcher who is on the AS I am very aware of the potential to misunderstand people without contextual background to facilitate my interpretations. Throughout the process of writing this thesis I have become aware that readers who do not share my AS thinking style are not necessarily able to access what I am trying to communicate or my reflection of the teachers’ voices. Through the use of case studies which provide rich and detailed conversational extract I hope I have avoided this difficulty.

Through the introduction of myself as researcher and some of my core beliefs and knowledge constructions, I acknowledge and place these filters within the research. Following on from this, the other research participants, the teachers and their students on the AS will be introduced within the outline of their school.

Canterbury is a small region within a small country and many of the region’s education professionals know one another. In order to preserve the anonymity of the participants, but keep the research firmly grounded in its context it was necessary not to name where in Canterbury the school was situated and to use pseudonyms for the participants that completely hid their identity, including their gender. The school is one of a number that I worked in during the period this research was carried out.

The research design will then be presented, including the data analysis and findings collation, with further explanations of how activity theory was used to support the exploration of data and possible interpretations of teacher effectiveness with students on the AS. The ethics process for the research implementation will be introduced with a summary of the issues involved. The limitations of this framework and the research design and implementation will be mentioned, followed by an outline of the findings in Chapters Four through Six.

3.1 Social Constructivism as a viewing lens

This research, as with most social science research, is fundamentally “concerned with people and their life contexts, and with philosophical questions relating to the nature of knowledge and truth,” (Somekh, 2008, p1). In this case, I am looking at teachers and their contexts, with a view to trying to understanding how contextual factors influence effective teaching of students on the AS in regular classrooms.

Constructivism suggests that “realities are apprehendable in the form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature,” (Guba & Lincoln, 1994, p.110). In this case, I aimed to focus on the constructions expressed by teachers within their classrooms contexts in relation to their teaching.

As discussed in section 1.6, within the umbrella of constructivism, I brought with me a social constructivist approach to knowledge, meaning that I perceive people make sense of the world in personal and complex ways influenced by time, place and culture. This led me to think that I needed to understand the teachers’ individual constructions through an iterative process of reflection and discussion between myself as researcher and each teacher. A social constructivist approach also validates the importance of culture and holistic contexts, as these are where the realities are located and interpreted. Education is framed by society, locally at a school level and then again nationally. Within this teaching has a personal context as well as school and wider community contexts. I used ideas within activity theory to assist the explorations of mediators involved for the teachers that I had observed or issues that had become apparent through discussions. The notion of rules, community and tools for example

were helpful in sifting through the large amount of data gathered and putting forward ideas for the interpretation of this data.

Social constructionism validates every opinion of every group. Nobody can be wrong about anything since there is no-thing to be wrong about. All opinions are equally laudable. Beliefs are valued simply because they express the agency and perspective of a group, or because they offer a new and different perspective on things, (Ratner, 2005, p.4).

This viewpoint was helpful in reassuring the participant teachers that I was not judging their attitudes or opinions, but seeking to ascertain their perspectives to try and gain an understanding of how they felt in relation to trying to effectively meet the needs of their students on the AS.

Teaching as with all human experience is extremely complex , tempered with unpredictable behaviour of students, teachers and school management. In addition the purpose of education is interpreted differently, depending upon the ideological lens which one is using. “Inevitably, therefore, educational research has a political dimension,” (Somekh, 2008a, p7). In this research the political context has been identified through the exploration of the interaction between key educational policies and the teachers’ observed actions and discussions.

Rather than implementing a quantitative approach to identify and track aspects of teaching that seem to correlate with positive academic student outcomes, I was more interested in ascertaining if aspects of the context influenced teachers’ effectiveness in terms of the presence, participation and social and/or academic progress of students on the AS. In line with social constructivist views of teaching actions being formed and sustained by social structures and

interactions, rather than being fixed constants (Bullock & Stallybrass, 2000), this required a qualitative approach, using data collected through observation, collaboration and conversations.

With a lens of social constructivism, the complex contexts of teaching and learning are interpreted as being informed by cultural meanings of both wider society and the individuals involved. Focusing not just on the teacher's stories, I aimed to locate my data within the broader macro-scale socio-political contexts (Hustler, 2000) of Aotearoa/New Zealand's educational system in order to understand how those contexts influenced the teachers.

Suggestions of universal truths set out in medical model literature, such as the definition of autism within the DSM-IV-TR (American Psychiatric Association, 2000) can become generalised socially accepted constructions. This contrasts with social construction on a personal level, but can lead to a paradox. In this paradox, individuals live, act, speak and think within their own social constructions but may have to use or buy into generalised 'external' truths (Staver, 1997).

However, some of these generalised truths form part of the complex contexts within which teachers teach. In order to analyse how these paradoxes are resolved by the teachers, I needed to explore what happens in complex classroom contexts when internal social constructions interact with generalised truths.

Activity Theory is well suited to analysis of human behaviours within complex contexts, as evidenced by the growing using of Activity Theory outside of the field of psychology (Holzman, 2006). I decided to utilise the categorical ideas within Activity Theory to assist in

my data exploration and organisation because it is well matched with research within complex contexts.

3.2 Activity Theory as Contextual Framework

Activity theory, like social constructivism, stresses the importance of the socio-cultural context (Jonassen & Rohrer-Murphy, 1999). For constructivists the context is significant in the formation of knowledge for each person. In activity theory the context is significant in terms of the effects it has on the person's actions. Activity theory theorizes that what people do is shaped not just by what they know, but how they interact with their contexts. Activity Theory is based on the argument that in order "to understand individual action and support individual and system development we must study action in the context of the broader activity in which it is taking place" (Daniels & Cole 2002, p.311).

Activity theory is able to examine complexity if is viewed as a powerful socio-cultural and/or socio-historical lens through which most forms of human activity can be analysed (Jonassen & Rohrer-Murphy, 1999). This theory evolved from Marxist philosophical and psychological interpretations of the concept of activity. "The concept of activity is a theoretical bridge between the individual and society, between the constructive potential of the human subject and the historically accumulated social constraints and cultural meanings mediating everything the subject does," (Lektorsky, 1990, p.ix).

Activity theory focuses on the "interaction of human activity and thought within its relevant environmental context" (Jonassen & Rohrer-Murphy, 1999, p62). In both activity theory and

constructivism, activity/creating knowledge or 'doing' cannot be understood or analyzed outside the context in which it occurs. Nikiforov (1990) further developed Vygotsky's theory of the cultural formation of the mind to suggest that even though people are guided by socially accepted norms and standards a single activity will be carried out differently by different individuals because activity is directly influenced by the personality of the subject. In activity theory human learning is interpreted to be "the appropriation of culture and the enhancement of participation in a proactive control of life circumstances," (Langemeyer & Nissen, 2005, p.189). Engeström (1999a) suggests that activity theory reflects the multi-faceted, ever changing, richness of human activity, by regarding internal contradictions as an essential feature of the theory.

Bourke & Mentis (2010) used an activity theory analysis to research and evaluate narrative assessment and curriculum exemplars for students with special needs in Aotearoa/New Zealand. They were concerned with activity systems present in schools, and found that contradictions occur in complex systems, especially where there are a number of roles within that system. Engeström (1987) developed cultural historical activity theory (CHAT) which placed complex contexts within an overall system. All teaching and learning in the classroom is inter-related to the teacher and their internal and external contexts; however for this thesis, when analysing teachers teaching using the ideas encapsulated by activity theory I focused on specific goals to examine the kinds of activities that the teachers engaged in, the contextual rules and norms framing that activity, and the larger communities in which the activity occurs. Bannon (1997) describes how process of the subjects in activity theory shaping external activities ultimately results in shaping internal ones.

At its core, activity theory proposes that when people interact with and engage contextually (in their environment) the production of mental process produces, what constructivists call, tools/instruments. As the instruments manifest, they become more communicable to other people and therefore useful. Activity theory analysis shows that, in an education context, people who are participating actively to support student learning encounter contradictions in how they achieve common goals:

They do so through their various roles, which at times conflict with rules or expectations within the context they work, creating tensions within and between systems. In identifying some of these contradictions and acting on them, barriers to teacher learning, and to policy implementation can be explored. (Bourke & Mentis, 2010, p.64).

Figure 13 - Engeström's Learning by Expanding (1987)

(figure within text translated from the German)

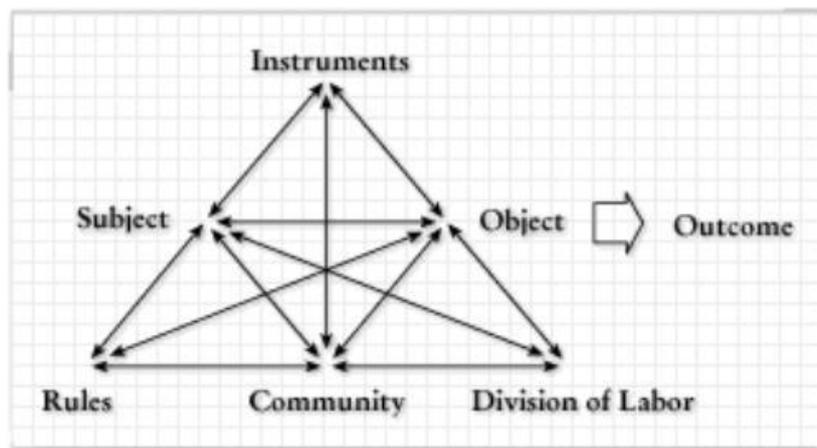


Figure 13 shows how Engeström (1987) broke activity down into its component parts, describing this as an activity system. The primary focus of activity systems analysis is the production of some object or achievement of a goal. The production of any activity involves a

subject, the object of the activity, the tools that are used in the activity and the actions and operations that affect an outcome (Nardi, 1996). In figure 13 activity theory is represented as a framework of mediators between the contexts, the subject, and the object which then influences the outcome. When this representation is used for analysis the outcome is unknown initially, while all the other components are known.

In order to work with a known goal or object and required outcome, but an incomplete knowledge of the complex contexts I used a philosophical interpretation of activity theory and have called this the adapted activity theory framework (AAT). In this, I utilised the labels/classifications of contextual parts given in activity theory to create tables that enabled me to identify key mediators and contradictory factors.

Human activities are driven by certain needs where people wish to achieve a certain purpose (Engeström, 1987), in this case teachers wanting to be effective teachers for students on the AS. This activity, teaching, is usually affected by, among other things, one or more instruments or tools; the teachers' time, energy, plans and curriculum materials. The concept of mediation and tension is central to activity theory, making activity theory useful for complex contexts because the framework can help to identify mediators and tensions (Engeström 1987).

In activity theory tensions afford or constrain possibilities depending upon the internal and external contexts of the teacher. What may constrain one teacher may afford possibilities to another. The teacher being observed/collaborating in this research is the subject, and the tools/instruments are created thoughts and things used within, or affecting the teaching context. The following table summarises the contexts represented by each of the headings within this philosophical framework as I used them in searching for an understanding of the teachers and their complex teaching contexts.

Table 2 – AT classification template for this research

Activity theory framework classification	Research context
Subjects	The individual teachers
Object/goal	For the teachers to teach students on the AS effectively, where effectively is defined in terms of increased presence, participation and learning in the class and the school (Ministry of Education, 2006)
Rules	National regulations/laws and school policies and procedures and classroom rules
Tools/Instruments	Resources available for or created by the teachers, like time, energy, teaching materials, curriculum documents and people, teacher skills and knowledge. Internal feelings, attitudes and other personal characteristics
Communities	classroom, school, local community and wider society
Division of labour	Teacher aides, school management and specialist staff/support professionals supporting teachers
Outcome	For the student with ASD to experience effective teaching, where effective is defined in terms of increased presence, participation and learning in the class and the school (Ministry of Education, 2006).

As can be seen from Table 2 there are both external and internal contexts within the AAT framework. From a constructivist perspective rules are a social construct that a person may or may not agree with, or abide by. In order to examine what contextual factors had what effects it seemed necessary to examine as many of those factors as possible. Table 3 lists these factors and contexts grouped according to their activity theory category.

Table 3 – External/Internal Contexts that exert tension on the teachers

AT Classification	External Context	Internal Factor
Rules	School policies National laws	Personal ethics/rules governing behaviour
Tools	Existing planning templates and IEPs	Planning and IEPs created by teacher
Community	Views of education, inclusion, national and school policies	Belonging to or being outside of
Division of labour	Support available for teacher (teacher aides, SENCO, support professionals)	Attitude towards being in a team, attitude towards teacher aides and outside professionals
Object (effective teaching of the student on the AS)	Culture, language, strengths and needs of the student	Belonging to or being outside of the student's culture and/or language group, understanding or lack of, of the student

In the next section I explore the theoretical links between activity theory and social constructivism and how I these were used together within this research.

3.3 Activity theory and social constructivism as theoretical framework and filter

Vygotsky (1986) used his activity theory to develop a cultural-historical theory of language learning, which can be seen as a social constructivist theory of the knowledge of language. In this theory, mediation and tensions are the central tenet in which action with media, or tools, makes the meanings of lived experiences more accessible and comprehensible (Wohlwend, 2009). Mediation/tensions explain how individuals learn the ways of the contextual/situational culture through ‘being and doing’ and interacting with other people and contexts. I aimed to examine what tensions afford or constrain the teachers’ actions students on the AS as they sought to try and meet the needs of their students on the AS.

Activity theory conceptualizes consciousness or conscious thoughts differently than traditional cognitive psychology. Consciousness is manifested in doing, ‘what you are is what you do’. However what you do takes place within a social context of both people and things or systems that are used in the ‘doing’/ the activity (Jonassen & Rohrer-Murphy, 1999). This makes it necessary to analyse the activities in which people, in this case teachers are affected by the wider context and the performance consciousness existent in the wider community that surrounds teachers teaching.

Consciousness is not a set of discrete, disembodied acts (e.g., decision making, classifying, remembering) that are regulated by executive control mechanisms (Nardi, 1996), which is the way that instructional designers typically analyze conscious knowledge. Rather, consciousness is the phenomenon that unifies attention, intention, memory, reasoning, and speech (Vygotsky, 1979). (Jonassen & Rohrer-Murphy, 1999, p65).

Holzman (2006) links social constructivism and activity theory through the importance they both place on the socio-cultural context. There is a strand of social constructivism based on ‘activity-related assumption,’ in which, an individual is “regarded as an active participator in conceiving and shaping its own developmental course by being actively involved in a constant inter-action with the world” (Stetsenko & Arieivitch, 1997, p160). This assumption is part of the activity theory framework, which suggests that people’s activities are shaped by and shape people’s interaction with their socio-cultural contexts.

From this activity-related assumption, social constructivism and activity theory can be seen to work together as an analytical tool and philosophical perspective. In this combined framework the unit of analysis refers neither to the properties of the teacher as such (the tools) nor to the

properties of the context as such, but rather to the elements that represent a transaction/interaction between the two. Teaching, the subjects' activity is at the focus of analysis (Stetsenko & Arievidtch, 1997). The teacher/subject is defined through their involvement in; classroom, school, community, national and personal contexts. Both human thought and action are defined as an activity, a way of being and doing in concrete situations.

Nardi suggested that "Activity theory proposes that consciousness is shaped by practice, that people and artefacts mediate our relationship with reality. Consciousness is produced in the enactment of activity with other people and things, rather than being something confined inside a human head" (Nardi, 1996). This suggests that activity theory can be used as a clarifying descriptive tool for context based analysis of teacher behaviour in the classroom.

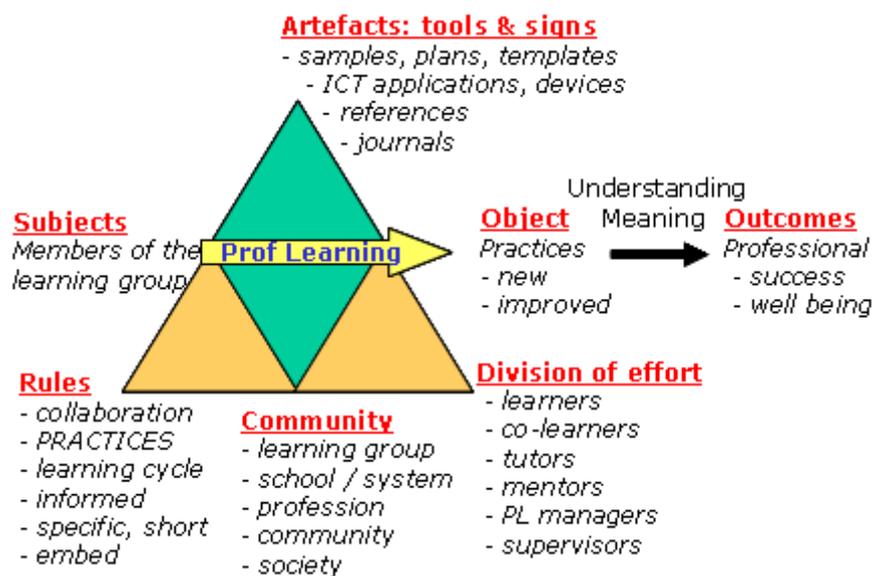
Social constructivists feel that, for teachers to facilitate students' learning, understanding the student's unique constructions is vital (Oldfather, West, White & Wilmarth, 1999). This is particularly pertinent where students may have constructions that are new and/or very different to the teachers, as many students on the AS are prone to have. For example, when using toy animals for a counting activity during maths, a teacher became exasperated because a student on the AS would not count the animals. Instead, the student was sorting them by colour and size and ordering them. The teacher's construction was that the animals were an aid to counting, whereas the child's construction was that the animals needed ordering. When the activity was redone using plain, uniform, wooden cubes, the student participated in the manner expected by the teacher in the original activity (Personal observations, 2008).

Activity theory explains that the rules/norms are mediators on the teacher and may pull towards (afford) the object of effective teaching or away (constraining), depending on the context. In

the case of counting the animals, the animals are a standard part of the numeracy package and so are ‘expected’ to aid counting, whereas they were actually a distraction for the child whose interpretation of the task was quite different from that of the teacher.

Figure 14 is an activity theory framework for professional learning from a University of Tasmania (2010) website. Figure 12 clearly demonstrates an activity theory model illustrating contextual elements that can exert tensions on the subjects as they work towards their objective/outcomes.

Figure 14 – Activity theory representation of the tensions provided by contextual elements



(University of Tasmania, 2010)

This type of model is able to be used when looking at the complex situation of adapting teaching interactions with particular students within a classroom. I aimed to ascertain what factors hindered or helped teachers in their journey to try and meet the needs of students on the AS. I started off with the idea that in order for the teacher to achieve their an **outcome** of

increased presence, participation and learning (effective inclusion as defined by the New Zealand Ministry of Education, 2006) for the child on the AS in their class, they interact with certain '**tools/instruments**' which may include such things as knowledge, experiences, skills, understandings and/or actual physical **products**, like individual education plans.

The teacher's **activity** is typically affected by the **tools/instruments** used and **rules** that are considered in relation to the activities, e.g., behaviour policy documents, classroom layouts, timetables, curriculum documents, as well as the new national standards and other legal requirements. The activity of teaching is also a part of the national, school, and family **communities** in which the teaching is being carried out. The school and family communities may oppose or support aspects of teaching and may facilitate or impede access to resources such as information, teacher aides, courses, curriculum materials.

The national framework for education creates a set of expectations that may be interpreted as supporting or constraining individual teachers and their teaching. In addition, the community may support or impose **rules** on the **subjects**, those teachers who are undertaking the activity, or grant them discretion in their activities. In this instance those rules are inter-related to some of the tools and artefacts; behaviour policy documents, classroom layouts, timetables, curriculum documents, as well as the new national standards.

There may also be 'rules' about the kind of knowledge, skills, understandings and experiences that will be seen as acceptable by the families and school community involved as well as

‘rules’ about access to funding and support, as well as who is permitted to do what, when and how. To the extent that they are engaged with the community, the teacher/subject may share responsibility with community for the achievement of the object – the increased presence, participation, and learning of the children on the AS in the mainstream primary classroom. This is likely to be realised through some form of **division of labour** such as the help of people such as myself as a researcher/special needs teacher and the use of teacher aides, release time from the classroom to share learning journeys and family input for individual education plans.

Yamagata-Lynch and Haudenschild (2008) used activity theory as a framework to analyse inner contradictions in complex educational situations. They were looking at teacher perspectives of the situational factors influencing their own professional development. Analysis with activity theory led to the findings that “teachers perceived that their motivation and goals for participating in professional development were not in alignment with their school district and universities that designed and facilitated professional development activities” (Yamagata-Lynch & Haudenschild, 2008, p.2).

Pearson (2009) also used activity theory because of its suitability in complex situations. Bourke and Mentis (2010) used activity theory because of the ease with which it could support identification of changes due to changes in the complex activity system as the roles and responsibilities were changed during the course of their research. I was particularly interested in using activity theory to look at the tensions that affected the teachers’ ability to effectively teach students on the AS in regular classrooms.

Once contextual factors had been identified, I tried to ascertain any major influencing factor(s) via in-depth classroom observations and one-on-one conversations with the teachers within the contexts of classroom, school and national social and educational policies and regulatory framework to see if the teacher(s) did experience certain hindering or supporting effects from particular contextual factors.

3.3.1 Limitations of Activity Theory

“Activity theory remains marginalized from the disciplines in which it has the most active scholarship - developmental and social psychology and educational research... because activity theory is too radically methodological to be embraced by mainstream psychology... yet on the other hand, activity theory is not radically methodological enough to be fully embraced by postmodern psychologists” (Holzman, 2006, p7).

In the context of educational research, activity theory has mainly been used to look at information technology teaching and learning and other IT applications, although Macdonald (2006) used activity theory as the theoretical framework for her research looking at South Africa’s educational reform. Bourke & Mentis (2010) used activity theory as their framework for researching and evaluating narrative assessments and curriculum exemplars for special needs students in Aotearoa/New Zealand.

Yrjö Engeström, a Swedish theorist, reworked the earlier Russian activity theory in a 1987 paper “Learning by Expanding”, so that the framework of “activity” had three interacting entities; the individual, the object of the activity, and the community in which the activity is

situated. This triangle version of activity theory is a useful paradigm for looking at something that is placed within the tensions of a cultural framework, such as educational outcomes for students on the AS, as it can help explain how social structures — both tangible things and organisations— influence and constrain or afford what is taught, how and to whom.

One of the limitations of activity theory is the suggestion of a “linear and one-directional causal relation: the characteristics of the input determine the processes which then determine the outcomes” (Andriessen, 2002, p1). This underlying linear relationship influenced the limitations in activity theory identified by Da Cruz Neto, G., Gomes, A. S., & Castro, J. B. (2005) who designed a new framework for use with organizational models. Finally, activity theory cannot prove causality, and as such could be seen as a limiting theoretical framework. However, as a tool to explore the tensions and possible reasons behind actions/inactions in complex contexts it is incredibly useful.

3.4 Research Design and Ethics

Following research proposal approval in 2009, ethics approval was obtained. Ethics in educational research is important to ensure protection and privacy of research participants and their autonomy within the research process (Howe & Moses, 1999). Canterbury Primary was chosen as it was a school within which I worked part-time, that had a large number of students on the AS. Due to the organizational nature of primary schools, research needed to be carried out over one academic year. This was important as a teacher may have a student on the AS in their class one year, but not the next. The teachers were selected using judgement/purposeful sampling techniques. That is to say I actively selected the most productive sample to answer the

research question (Marshall, 1996). In this case that meant the teachers needed to have a student on the AS in their class for the 2010 school year and to be working on the days that I was able to be in the classroom too. Purposeful sampling was chosen instead of random sampling of a population, as random sampling is only likely to be a representative sample “if the research characteristics are normally distributed within the population. There is no evidence that the values, beliefs and attitudes that form the core of qualitative investigation are normally distributed, making the random sampling approach inappropriate” in qualitative research (Marshall, 1996, p.523).

Prior to commencing classroom research, the information letter and informed consents were sent to the Board of Trustees and Principal. Once these were returned, the information letter and informed consents were presented orally and given to teachers. Following this, the information letter and informed consents were sent to parents and students. Informed consent was not just a part of the ethics approval process; it was an important on-going aspect of the trust relationship between myself as researcher and the research participants. Underpinning this consent process was the idea that participants should be respected as persons and professionals. The consent forms (Appendix 8) ensured that teachers knew their teaching of and interactions with students on the AS were the focus of observations. Ethics approval was also obtained to use the detailed observation schedules used to ensure teachers were teaching the students on the AS (appendix 3), the IIQ questionnaire (appendix 5) and the ASD knowledge questionnaire (appendix 6).

“Ethical codes for research are intended to address the potential conflict or tension that may arise between the needs and goals of the research and the rights of research participants,” (Adu-

Gyamfi, & Okech, 2010, p.130). In this research I needed to ensure the right to privacy and respect for the teachers whilst collecting conversational and observational data that might reveal unflattering sides to the teachers. Ethics in research not only aims to protect the participants but to enhance the quality of research outcomes by providing guidance for the researcher (Gyamfi, & Okech, 2010). The ethics process facilitated my identification of risks for the teachers and students and my planning to minimise these risks. An example of the minimisation process was the use of member checking of early drafts so that the teachers could veto the inclusion of quotes or analyses they were uncomfortable with, or felt that they could identify them.

In addition to providing participant teachers, class members and their parents information and obtaining informed consent, I also spoke to all the classes, the teachers and each of parents of the students on the AS, to ensure they understood what I was researching and how. Informed consent was obtained from every pupil and their parent/carer in each class in which the teacher was taking part in this research. This consent gave permission for the students to be present during my observations. All the information letters and informed consent forms are presented in appendix seven.

After obtaining informed consent, the other participant teachers completed the ASD questionnaire and the IIQ. I collected data for the 2010 school year, analysing the data constantly through an iterative process (Lichtman, 2006), including member checking to facilitate authentic representations of teacher conversations (Harrison, MacGibbon & Morton, 2001). Data collection methods are detailed in section 3.5.

Initial observations of the classroom and interactions between the participating teachers and the students on the AS were undertaken along including a time-trial observation of each the students on the AS, looking at presence, participation and learning. These were analysed to give the percentages of time the students on the AS were physically in the classroom, when they were participating in activities with their peers and when they were learning. For this purpose learning was recorded when students were actively engaged or demonstrating an understanding of new concepts/topics or new skills. These observations were done to ensure that students on the AS were actually being taught by the participating teachers, rather than spending the majority of their time in withdrawal groups. If this had not been the case, I would not have included that teacher in the research.

Towards the end of the school year, after the classroom observations and discussions, the participating teachers repeated the AS questionnaire and IIQ so that I could compare and contrast these with their initial responses. Time-trial observations of the children on the AS, looking at presence, participation and learning, were repeated in order to compare and contrast with the base-line levels of these. These comparisons are not included in this thesis as they did not provide a depth of data to match the conversational and observational data, nor was the IIQ data contextually situated. The IIQ is further explained in section 3.7.1.

I also met to have a final discussion with each individual teacher to summarize the year in relation to their experience of teaching the student(s) on the AS and to get feedback from the teachers with regard to the usefulness of the support or lack of, that I provided. Following this I

was able to analyse the data, and write drafts of this thesis and ensure the participating teachers were given time to read and approve early drafts. This ensured member validation, as the research participants could both recognize and understand my descriptions as reflecting their thoughts and actions (Neuman, 1997).

3.5 Rationale

The research was not aiming to judge educators, but to try and find out if specific contextual factors influence effective teaching of students on the AS in regular classrooms. I was additionally hoping to gauge whether targeted professional development with on-going feedback and support is a useful tool for teachers in their practical application of inclusion policies in Aotearoa/New Zealand in relation to children on the AS. Gates wrote “it is amazing how little feedback teachers get to help them improve, especially when you think about how much feedback their students get” (Gates, 2010, p.8).

To further increase the depth of feedback and support that I could make available for the teachers, the pre-intervention stage also looked at what participating teachers wanted that would, in their opinion improve outcomes for their students on the AS.

3.6 Methods and Data Collection

The major contextual factors that I suspected may be influencing the effective teaching of students on the AS were teacher skills and knowledge and/or teacher willingness to implement a teaching and learning programme that would meet the needs of the student(s) on the AS. For

a finding to be validated or refuted, I needed detailed observations relating to the teaching of the students on the AS and conversational data to develop an understanding of the teacher's skills, knowledge and willingness in this area.

Detailed classroom observations, using running records of every observed phenomenon in the classroom that involved either the teacher and/or the student(s) on the AS were followed by one-on-one discussions. These observations and discussions were carried out once a fortnight for a morning or afternoon session from March to December of 2010. The observations looked at the teaching and learning of the whole class and compared it to that of the students on the AS within the class. For example, an observation of a class during reading, where most students were off task would be recorded as "student as engaged as peers" with a note that the student on the AS was walking around the class off task along with the majority of their peers.

I took notes of everything that I saw or heard in relation to the teachers' interactions with their student(s) on the AS, whether one on one, or one to small group, or one to whole class. Conversations were noted down as they were happening and supplemented by further details immediately after. I have a very good auditory memory and used this in combination with searching through the notebooks of conversations to collate the data. To ensure credibility, the teachers were able to see my observational and conversational notes and member checked the early drafts (Buchbinder, 2011).

These observations and discussions revealed that the complex demands of teaching and learning were indelibly influenced by more than contextual school and policy requirements. For example, although numeracy is required to be taught for at least an hour daily in line with

curriculum guidelines using particular supporting materials and apparatus for the varying ability group, the teachers' responses to their students on the AS varied considerably. The suitability of the AAT tables as an analytic support framework enabled me to identify the links between many of the complexities and the tensions these resulted in.

There have been many studies focusing on attitudes towards inclusion (Leatherman & Niemeyer, 2005; Parasuram, 2006; Tait & Prudie, 2000) in the general area of special needs, although very few, if any, have been conducted in relation to the AS. My own interest in the AS has grown as a result of the tensions I see arising from the publication of the 2008 guidelines (Ministries of Health and Education) that give greater respect to the rights of children on the AS to receive an equal educational experience as their peers against a climate of ever-decreasing funding and an uneven level of understanding of autism and people on the AS by psychologists and educators.

This decreasing funding has occurred because the bar for Ongoing (and Reviewable) Resourcing Scheme (ORRs/ORs) funding (Aotearoa/New Zealand's special education needs funding system) appears to be higher than in years gone by and more young people seem to be receiving diagnoses of ASD (Howick Pakuranga Principals Association, 2008).

It is very hard for students who are verbal, but have are on the AS with minimal or no physical or sensory impairments, to meet the criteria for ORs funding. Criterion four is designed for "students who have communication and social behaviour that is *extremely* unusual, repetitive and inappropriate in their social context" (Ministry of Education, 2011). Focusing on the

extreme case has increased the difficulty for obtaining funding for verbal students on the AS who have some level of spoken language, even if actual meaningful communication is very difficult.

Most of the teachers I have encountered in Aotearoa/New Zealand seem willing to include students on the AS in their classrooms, with only one exception in four years. I thought that being willing would not necessarily lead to being able to include students on the AS who present many challenges to regular teachers. I thought that negative experiences may also lead to a decrease in willingness among individual teachers or schools.

Despite the recommendations in the Godfrey, Moore, Fletcher-Finn & Anderson report that “the obvious first step is professional development for mainstream teachers” (Godfrey et al., 2002, p141), there was only one targeted course available nationwide, Tips for Autism, and this was only sporadically available to teachers. It is a four-day course, delivered to the ‘team’ working with a student on the AS; teacher, teacher aide, parent and SE specialist.

I hoped to gain an insight into teacher constructions of autism and children on the AS via the IIQ and through conversations over the year, as research indicates that attitudes towards disability and disabled people could adversely affect students’ learning. “Teacher attitude is one of the most important variables in the education of children with disabilities” (Parasuram, 2006, p.231).

The attitudes of teachers toward people with disabilities are important because of the relationship, albeit complex, between attitudes and behaviour... Of primary importance

to teachers, parents and students alike is the notion that negative teacher attitudes toward children with special needs are likely to have a negative effect on the outcome of inclusive programs (Tait & Purdie, 2000, p.26).

The table below illustrates the AAT framework used to look at how a particular aspect of the context; for example student achievement targets, creates tension within the overall complex context, and how this is resolved by the teacher in respect to teaching their student on the AS. Within each related contextual element there was an abundance of observational and/or conversational data that could be put into that space. Interpretations of this data and constructions of affordance or constraint were then arrived at through an iterative process of checking with the teachers that I had understood and validly captured their perceptions, and noting affordances and constraints and then re-evaluating these at a later date.

Figure 15 – Example of AAT as a framework for analysis of effective teaching of students on the AS whilst focusing on student achievement targets (Rules)

Activity theory classification	Related contextual elements	Related observational and conversational data	Affords or constrains subjects in their object of effective teaching of students on the
Tools / instruments	Planning templates, teacher time, energy and mood, student achievement targets		
Rules	National standards, national curriculum, school assessment policies		
Community	Teacher reporting to; principal, board of trustees, teaching union, parents, local community		
Division of effort / labour	Availability of teacher aides, support professionals, SENCO and parent help		

In tools, one of the mediators listed is time. Effective teaching of students on the AS requires additional adult time in the classroom, which needs to be provided by the teacher (tools) or another adult (division of effort). Students on the AS often require significant one-to-one interactions to ensure they understand the tasks being set. Additionally students on the AS may exhibit challenging behaviours due to sensory sensitivities and/or communication difficulties. Behaviour management can also take up significant amounts of time and energy. Given that teachers have a finite amount of time in which they are required to cover the curriculum; this poses a huge tension for both the teacher and the learner.

Students need to be motivated; to be engaged with the learning. Many students on the AS need tasks to be explained to them in ways that they can understand before they can access learning. For the students in this study this translated as the teacher having to break down the task into constituent parts and explain each one clearly, using simple language and/or visual supports. This clearly puts added pressure on busy teachers, who in this study had at between 23 and 29 other children in their class to supervise. The AAT framework helped to identify a number of conflicting teaching demands (rules, community), how these conflicts were resolved (the large central arrow), and how such a tension impacted upon the teacher's effectiveness for the students on the AS.

3.6.1 AS questionnaire and IIQ

The AS questionnaire (see Appendix 6) was designed to elicit information from the teachers regarding existing knowledge and understanding of the AS and the types of support the teachers felt they would need to support students on the AS. The one-page questionnaire was a

mix of tick box responses and short answers, able to be completed in less than ten minutes. The responses provided demonstrated both awareness and misunderstanding of the AS and students on the AS.

The AS questionnaire suggested that before taking part in this research, these teachers had a range of baseline knowledge around autism. This range of knowledge is presented in section 3.7.4 where the participant teachers are introduced. The questionnaire was repeated at the end of the year, although this was not found to produce any useful data as I did not ask when or how the teachers felt their knowledge changed. The questionnaire was designed to provide a quick snapshot of teacher knowledge and understanding of AS and what support the teachers themselves would like over the year.

The IIQ is used to look at attitudes, as attitude towards self and others is thought to be a factor in all social interactions, including teaching. There is a lack of consensus about how people's attitudes are formed. It is thought that attitudes stem from multiple factors including personal experience, observation of others and emotional processes, and that they have a direct influence on behaviour (Baron & Byrne, 1991; Rae, 2010). Furthermore it is thought that teacher attitudes can help to facilitate or hinder the implementation of educational policies, especially those that are viewed as controversial (Hastings & Oakford, 2003).

The IIQ was developed by Hastings & Oakford (2003) and been used by a range of researchers (Cagran & Schmidt, 2011; Ly, Kao, Richland, & Goldberg, 2010; Ntinis, Neila, Nikolaidou, Papadimitriou, Papadopoulou, Fasoulas, & Hatzikonstantinidis, 2006; Radanke, 2007 & Rae, 2007 & 2010), to look at the attitudes of teachers towards students with special needs. In line with the research being undertaken at the University of California (Ly et al, 2010) I edited the

IIQ questions so that they were AS-specific rather than general special needs targeted. To this end the words special needs were replaced with ASD.

The IIQ has twenty-four questions in total, with six items in each of four potential impact domains: the child with special needs themselves, other children in the classroom, the teacher, and the school or classroom environment. Hastings & Oakford developed the questions “based on issues raised in existing research literature relating to the inclusion of children with special needs in mainstream classrooms, and through pilot interviews with teachers.” (2003, p89) Teachers respond using a seven-point agreement scale ranging from “very strongly agree” to “very strongly disagree”.

IIQ questions about the perceived effect on the child with ASD included the impact upon acceptance/rejection by classmates, the student’s own personal development, and the student’s own academic development. Questions about the perceived effect on the other children in the class included the impact upon contact time with the teacher, the other students’ behaviour problems, and the rest of the class’s learning opportunities. Questions about the perceived effect on the teacher included the impact upon stress, tiredness, and workload. Finally, questions about the effect on the school or classroom environment domain included the impact upon school finances, classroom routines, and parent and community perceptions of the school.

The teachers’ attitudes to the four domains were re-evaluated at the end of the year, to see if there were changes in any areas. Using the IIQ provided a range of information about teacher attitudes that enabled support to be personalised to reflect the self-identified needs of each teacher. For example if a teacher felt that the effect on themselves would be negative, I planned to cover personal stress, tiredness and workload issues in discussions with that teacher.

The IIQ is scored by generating summed scores for each of the areas described above and also a total attitude score. Scores on negatively phrased items are reversed so that higher totals on each of the five IIQ scores indicate more positive attitudes. Resultant scores indicating attitudes by teachers towards students on the AS can then be seen in each area and as an overall score. The questionnaire is very easy to read and takes very little time to complete, meaning that it was a practical tool for measuring teacher attitude. However, Cipkin & Rizza (date unknown) suggested that the IIQ did not provide data that could be generalized.

Although the IIQ was a useful tool for planning to work with these teachers, it did not measure willingness to engage with students on the AS or personal stress that may impact upon this. This meant it seemed unreliable as a predictor of teacher voice or actions over the year, instead providing only a snapshot of attitude out of context. As I wanted to firmly place the teachers' voices in context, data collected from all the IIQs are only summarized in tables 8 and 15 and the in depth analyses are not presented in this thesis.

3.6.2 Observations and Conversations

The four teachers who took part in this research over the 2010 school year, had approximately fortnightly conversations with me, following classroom observations of one to two hours each observation. Data from observations was obtained through my written recording of as many details as possible of what I could see and hear in the classroom in relation to interactions between the teachers and their students on the AS (Jones & Somekh, 2008). I used these notes to form the basis of conversations with and feedback to the participant teachers.

The national education strategies in the UK talk about feedback as being something that “is likely to be most effective when it encourages a very full and active contribution from the observed teacher. The role of the observer is to prompt self-evaluation and draw on information and evidence gathered from observation to promote and deepen the observed teacher’s learning and professional development” (Department for Education, 2011, np).

My feedback conversations with the teachers focused on analysing what was going well, what wasn’t and possible reasons why, in relation to their student(s) on the AS. These discussions were framed around the students on the AS presence, participation and learning. I also found that the teachers frequently brought up their emotional state and how they felt about their teaching. This seemed to indicate the feedback sessions were effective as teachers self-evaluated.

The conversations following on from my observations were always preceded by a personal catch-up, with the teacher and I checking up on how each other was and how things were going. This was particularly useful after the first earthquake and continuing aftershocks, when both staff and students needed to settle into themselves and their teaching and learning once again.

After observations having unstructured interviews in the form of conversations, enabled me to bring up aspects of previous conversations that I felt were connected to recent behaviour. This in turn facilitated the participant’s sharing of thoughts and feelings about contextual elements as well as of their own actions and experiences in relation to the students on the AS.

As the teachers and I interacted in this way repeatedly over the year, interviews became more collaborative and less managed by me. This may have been because the power between myself as researcher and the teachers as research participants became more equal because we were all searching for an understanding of the issues the teachers experienced as they tried to meet the needs of their autistic students. Glesne & Peshkin (1992) suggest that non-hierarchical relationships may develop in participatory research where researcher and the researched together define the research problem.

As Lage, Platt, & Treglia reported, “Recent evidence has shown that a mismatch between a teacher’s teaching style and a learner’s learning style can result in the student learning less.” (Lage et al, 200, p.30) I thought that, in line with De Clerq and Peeters’ (2011) view of autism as a different way of thinking and being, facilitating the teachers’ understanding of the way in which students on the AS learn would increase the effectiveness of students’ learning opportunities .

As I was observing in a class setting, all the children in the four classes had parental consent to be in the class when I was observing the teacher and students on the AS, as well as having also signed their own consent forms. The parents of the students on the AS gave informed consent for the interactions between teachers and students to be observed, recorded, analysed and used in this thesis and any other publications. Their consent was obtained following a face to face meeting with myself where I explained the research in more detail. Five of the six families continued to meet with me over the school year once or twice a term. Most of the students in the school already knew me as a part-time teacher and had previous experience of me observing in their classrooms. I hoped that this prior connection with the school would avoid issues of students behaving completely differently when I was observing than when I was not

in their classroom. Only one observation in the year was reported by the class teacher to show themselves or their students in an atypical way.

For this school year, I was reintroduced to each of the four classrooms and I talked with the students about the observations I was going to be doing over the year to see how teachers teach and students learn. All the classes were told that I was doing this as part of my learning at university and that at the end I needed to write a hundred thousand words. This information provided a certain amount of amusement for the oldest children, who thought I must be slightly crazy to willingly undertake such a large writing project. Throughout the year, this class would ask me how many words I had written so far.

The teachers and their students knew that I was there to observe, with follow-up discussions with the teacher as part of the on-going collaborative nature of this research. I had planned to use a mix of quantitative (the IIQ data and time trial data) and qualitative (observations and conversational data) research to evaluate teachers' attitudes, willingness and effectiveness in teaching their students on the AS. However, as previously mentioned the IIQ data was not used as planned. Additionally the time trial data was not included in this thesis, as although it demonstrated large changes, when it came time to selecting the information to include in the thesis I chose to focus on teacher constructions of their students and perceptions of constraining contextual factors.

Bogdan and Biklen (1992) suggest that interviewing is a better approach than observation when studying a number of individuals who have a commonality but are not part of a group. In this case all the teachers worked in separate rooms and could not have been observed en masse, and

the core data being collected was from unstructured interviews/conversations, which followed on from observations.

I worked with teachers iteratively. Iteration means moving back and forth, useful in qualitative research where it is difficult to cleanly separate out data collection or generation from data analysis because there is movement back and forth between generation and analysis (Srivastava, 2009). Generated data was collected at various points in time and analytical notes written about that data. These notes were then processed into memos or guiding notes to inform the next bout of data collection.

In qualitative research patterns, themes, and categories of analysis are reflexive and led by what the researcher wants to know and how the researcher “interprets what the data are telling her or him according to subscribed theoretical frameworks, subjective perspectives, ontological and epistemological positions, and intuitive field understandings” (Srivastava, 2009, p77). As researcher, I was discussing and developing meaning around teachers’ personal context of student, class, school and curriculum expectations. In order to do this I had in-class visits for a session each fortnight over the school year, with some gaps around earthquakes. This meant that there was time between visits for the teacher to process and evaluate, whilst giving enough external support in terms of time available for observation, planning, delivery and evaluation of inclusive practices.

In order to ensure that the research was collaborative and that both the teachers and I were reflexive, it was helpful to have a guiding set of questions for use with the teachers. The following table explains why particular questions were used to initiate and sustain reflective conversations with the teachers or with myself.

Table 4 - Questions that formed a basis for conversations with teachers

QUESTION	RATIONALE
What was being taught implicitly/explicitly?	Part of this research extended into looking at what counts as knowledge and is therefore explicitly taught, and who is deciding this. To students, their teachers represent authority concerning what counts for knowledge and whose knowledge counts. “When teachers fail to acknowledge students’ worlds the students are likely to feel alienated or even invisible” (Oldfather et.al, 1999, p. 12). This data will be gathered during the fortnightly conversations.
What was the teacher expecting the child/ren to learn vs what they are learning?	
What are the perceived barriers to presence, participation and/or learning? Are these barriers physical/structural/environmental/other?	Practical issues about teacher time and energy as well as skills, knowledge and attitudes are important aspects that I, as researcher, took into account. Need to find out what the actual barriers are. For my effectiveness as a support professional I also needed to look at what types of observations/ assessments will help and how do this within the class context?

3.5.3.1 Rationale

This cyclical process of reflecting on observations and teacher practice, teachers teaching slightly differently, both of us reflecting, and then the teacher continuing to teach slightly differently or modifying further and both of us continuing to reflect, shaped the research as it was being undertaken. Initial questions were left behind as new questions arose out of these shared reflections.

Timperley, Wilson, Barrar & Fung (2005) found that teachers are delighted and relieved when they see their students flourishing and that these teachers were taking part in some of the most effective professional development evaluated. I took these factors into account, planning for a whole year of working with the teachers so that they had time during the course of their collaboration with me to see if their students started to flourish or not. Research has indicated that external support professionals who “expected teachers to implement their preferred

practices were typically less effective than those who worked with teachers in more iterative ways, involving them in discussion and the development of meaning for their classroom contexts” (Timperley et al. 2005, p.xxix).

Putnam and Borko (2000) put forward the idea that the physical and social contexts in which an activity takes place are an integral part of the activity, and the activity is an integral part of the learning that takes place within it. “How a person learns a particular set of knowledge and skills and the situation in which a person learns become a fundamental part of what is learned” (Putman and Borko, 2000, p.4).

Professional development/support that I provided over the year, took place during teaching aiming both to shape teachers’ conceptual frameworks and be shaped by them. I was able to respond to and discuss teacher questions and theories in their classrooms, and if asked to model activities and strategies which the teacher could easily evaluate for their ease of use and practical effectiveness in their classroom.

Research indicates that teachers typically move from a period of personal concern (‘What will this do to me and my world?’) to a stage of management concerns, where the focus is on ‘doing’ the innovation. Only when teachers are emotionally comfortable with the innovation can they begin to adapt and adjust the new practice to particular students and contexts. “The way in which these stages are conceptualised is consistent with the notion of novice-to-expert developmental progressions,” (Timperley et al., 2007, p.12). In this case, I was prompting teachers to use strategies to communicate and engage their students on the AS in ways that are suggested in the ASD Guidelines (Ministries of Health and Education, 2008).

Research indicates that following assessment and interpretation of the relevance, usefulness, and cost/benefit; teacher learners/communities do one or more of the following:

- reject/ignore new theory and practice and continue with prior practice;
- continue with prior practice, believing that it is new practice;
- select parts of new theory and practice and adapt to current practice;
- implement as required;
- actively engage with, own, and apply new theory and practice and change practice substantively;
- demonstrate enhanced regulation of own and others' learning (Timperley, et al., 2007, p.14).

A key condition for facilitating change in teaching in the classroom is teacher awareness of discrepancies between the learning goals which they hold for their students and the evidence about what is actually happening, particularly in relation to student outcomes. Robinson and Lai (2006) explain the importance of engaging teachers' prior understandings in any change situation. In their view, teaching practice can be thought of in terms of solving problems: "how to manage and engage students, how to teach particular content, and how to do it all within the available time and resources" (Robinson & Lai, 2006, p.9).

It is also important to ensure respect for the Treaty of Waitangi and to facilitate co-operation with and interest in the wishes of the whanau/family for the student. This should not just be the case for Maori students, as families often know the intricate foibles of their children in detail that teachers do not. For example, whanau/family can provide translations for the non-standard vocabulary their child may use (e.g. white for trainers, blue for teddy, coco for Chloe – personal observations 2008-9). In the area of sensory sensitivities, whanau/family can provide information that can prevent or minimise meltdowns at school. Additionally for school age

students, the goals for learning (including social and communication goals) should always be agreed with whanau/family.

Cultural values and ideals were respected and taken into consideration at all times throughout the research, whether these were of the teachers, students or whanau/family or wider community. These values and ideals inform the goals that people have for their children, their students and for society. Aotearoa/New Zealand is officially a bi-cultural nation, though there are many cultures living there. Additionally, all students have the right, according to the declaration of human rights to which Aotearoa/New Zealand is a signatory, to an education that aims to develop each student to their full potential, as explained in the following table.

Table 5 - Declaration of Human Rights: Article 26

Rārangi 26	Article 26
<p>2. Ko ngā whāinga nui mo te mātauranga ko te whakapakari i te iho o te tangata, ko te whakapiki i te ngākau nui o te tangata mo ngā mana tangata me ngā āhuatanga herekore. Ko tētahi whāinga hoki he whakapiki i te māramatanga i waenga i te iwi, i te aroha o tētahi ki tētahi me te whakahoahoa o ngā whenua, ngā iwi, ngā rūpu hāhi, ā koinei hei hāpai i ngā mahi tautoko i te maungārongo a Te Kotahitanga o Te Ao.</p> <p>3. Kei ngā mātua te mana tuatahi ki te tohu i te āhua o ngā akoranga hei tuku ki a rātou tamariki.</p>	<p>2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.</p> <p>3. Parents have a prior right to choose the kind of education that shall be given to their children.</p>

Ministry of Education (2007)

3.6.3 Formal professional development sessions

Although not part of my research design two formal professional development sessions; on differentiated learning and one on Individual Education Plans (IEPs) were presented at the very start of the research on a teacher-only day, to all staff at Canterbury Primary. I am including this material as findings presented in chapters six and seven were related to the use of these new IEP formats. The professional development was designed in response to requests from the school principal and special needs co-ordinator (SENCO) at the end of the 2009 school year. The school wanted staff to understand why students may need an IEP, what an IEP should do and how. Alongside this, the school felt that some teachers were unsure how to teach students who were struggling to access learning. The school felt that it would link into my research project and so it was delivered at the same time as the teachers were given the information about the research and asked if they would like to be a part of it.

Differentiated learning is a practical approach that enables teachers to focus their planning and teaching to meet the needs of every student. It grew out of the belief that there is variability among any group of learners and that teachers should adjust instruction accordingly (Tomlinson, 1999, 2001, 2003).

The cornerstone of differentiation is active planning: the teacher plans instruction strategically to meet learners where they are and to offer multiple avenues through which they can access, understand, and apply learning. In differentiating lessons to be responsive to the needs of each learner, teachers must take into account not only the content, but also the individual students. (Corley, 2005, p.13)

Evidence has indicated that students achieve more in school and are more engaged if they are taught in ways that are dictated by their readiness levels (Vygotsky, 1986), and their interests (Csikszentmihalyi, 1990). By using differentiated instruction, teachers aim to address these for each student (Tomlinson 2001, 2003). The school hoped that through this professional development session teachers would gain a greater understanding of differentiation and how to use this as a practical planning and teaching tool.

During the presentations, teachers kept asking questions about how long differentiated planning would take. This focus on 'how long' reflected a finding by Corley (2005) that the greatest challenge for teachers in implementing differentiated instruction relates to time: the planning time that teachers need to assess learners' needs, interests, and readiness levels; to determine key concepts and organizing questions; and to design appropriate activities for each learner.

Overall all the teachers seemed to accept the key concept that differentiated teaching was about providing relevant learning opportunities. Junior teachers expressed the view that they would try to use this technique to meet the needs of struggling students, with senior teachers being more reserved as they expressed their curriculum coverage priorities.

IEPs are a legal requirement for students with special needs funding in Aotearoa/New Zealand. It could be argued that there is an ethical requirement for an IEP for non-funded students who are clearly struggling to make academic/social/emotional or communicative progress at school. IEPs detail the learning goals for a student over a specified time frame. The IEP format introduced to Canterbury Primary also recorded the teaching strategies to be used to enable the student to meet these goals, who will do what and when as well as how to know when the student has met the goal (appendix 8).

In a parent information leaflet an IEP is described as “a written plan that outlines your child’s goals and how your child can reach those goals... reviewed at least twice a year” (Ministry of Education, 2010, p.12). Canterbury Primary took up the idea to review the IEPs every term (quarter) so that progress or difficulties could be tracked more closely.

Feedback during the session from staff was that this IEP format would be far more useful than the existing three to ten page format. Teachers, who had previously filed IEPs as soon as they were written, put these IEPs in their planning folders or next to their weekly plans on the wall (out of sight of the students). Previously in filing the IEPs teachers reported that they were not using them as part of the planning, teaching and evaluating cycle, merely completing them to ‘fulfil requirements’. This was relevant for this research as every student on the AS in the school had an IEP.

3.6.4 Approach to data analysis

In line with constructivists, I believe that everything is a cultural construct, including the things people have knowledge about. When critical constructivists search for and present new knowledge, they are not attempting to reduce variables but instead to maximise variables. This influenced my decision not to include the IIQ data, which did not contain contextual markers or rich data. “Such maximization produces a thicker, more detailed, more complex understanding of social, political, economic, cultural, psychological and pedagogical world” (Kincheloe, 2005, p.3).

Through notes of what has been seen and heard in classroom observations, raw data was gathered and placed in the socio-cultural context in which it was situated. This data is interpreted and understood using the socio-cultural framework of self as researcher and teacher. Both spoken thoughts as well as observed actions form the data collected. This data was not then placed into pre-existing categories but instead examined and analysed using the socio-cultural contexts of the AAT framework/tables.

Interactions between teachers and students on the AS are a source for observation, as were the tensions placed on actions and interactions, both internal and external to the teacher. That “many activities have multiple motivation (‘polymotivation’) and can be analysed using this theory is one of the primary strengths of activity theory (WordIQ, 2011)

Activity theory focuses on deliberate actions that are realized through conscious intentions and decisions. According to activity theory, intentions emerge from tensions that individuals perceive in their environment (Jonassen & Rohrer-Murphy, 1999). Examples of these tensions are differences between what teachers believe they need to teach in order to effectively teach their students on the AS, and what the teachers are asked to teach by their school policies and/or national legislation. The teachers’ intentions, however, can exist only in the context of the intended teaching activity.

These observations were grounded in the theory that knowledge is constructed in the minds of humans, minds that are constructed by the society in which they exist (Kincheloe, 2005). Effective teaching increases knowledge in the minds of the students who are being taught, and that this teaching takes place in a complex context needs to be taken into account.

Activity theory embraces complex contexts within the framework of analysis of social (including educational) outcomes. Conversations between myself and the teachers were analysed for evidence of dissonance and change, while firmly situated in their social, political, cultural, psychological and pedagogical contexts. Tuckman, McCall, & Hyman had postulated that, “if teachers are known to have self-perceptions which are discrepant from their observed behaviour, and they are made aware of their observed behaviour, the resulting dissonance should lead to a change in self-perception, behaviour or both (Tuckman et al, 1969, p.607).

My analyses of the observed behaviours, discussions and any changes were qualitative and written up in the style of a case study, rather than coded for quantitative analysis. This was because I suspected that when change occurred or teacher voice was describing something of importance to the teacher, it would be indicated in the details rather than glaringly obvious. I also did not want to minimize variables, or lose contextual clues in quantitative coding. I was hoping to bring to the fore the critical constructivist perspective that each individual teacher sees and interacts with the world in different ways (Kincheloe, 2005).

3.6.5 Writing style for this thesis

Teacher views will mainly be presented through contextually based conversational extracts. “Dialogue embodies some of the character of qualitative research itself — exhibiting the authors’ voice, illustrating context, and demonstrating transparency,” (Bansal & Corley, 2011, p.233). As my voice is part of the dialogue, as both researcher and colleague to the other teachers, I have chosen to write this thesis using the first person. This offers clarity to the reader about my roles and my views versus those of the other teachers involved.

My interpretations of others' views are based on their words and observable actions and I aim to present this as concisely as possible whilst retaining a measure of the complex context in which those views came to light. It has been suggested that writing up qualitative research using the pronoun "I is more honest and direct," (Bogdan & Biklen, 1992, p.201) and enables the voice of the researcher to be reflected in the writing alongside the voices of the participants. This is helpful in this thesis due to my role as a participant and challenging due to my desire to present teacher voices and not judge the content of these voices.

3.7 The Research Participants

The idea of anonymity for research participants is important as it enables participants to say things that they might not feel comfortable saying if they could be identified. Aotearoa/New Zealand is a relatively small country with just over four million inhabitants. Canterbury, where this research was carried out is the largest province in the country, covering an area of 45,346 km² with a population of around 585,000.

Within the 176 primary schools many of the Canterbury teachers know one another and the schools at which they work. Because of the marked effects of the earthquakes, I needed to be open about the school being in Canterbury, and this therefore required me to ensure that the pseudonyms chosen for the school, teachers and students on the AS really did protect their identity. Further clarification on this issue is provided in each subsection.

3.7.1 *The School*

When choosing where I could do this research, I wanted a school that was expressly working with positive attitudes towards inclusion and had a relatively high number of students on the AS. This was to avoid systemic negativity towards inclusion or autism. Within this group of schools in Aotearoa/New Zealand, I wanted to be able to be in a school that I could physically get to easily, so that I could visit weekly or fortnightly.

I chose a school that I already worked in part-time and had good relationships with professionally as well as having a high number of students on the AS. This school was given the pseudonym of Canterbury Primary. Having worked within Canterbury Primary for a few years I was aware that this school had previously demonstrated positive attitudes to inclusion with an active Special Needs Co-ordinator (SENCO) and a pastoral care team that met regularly to discuss a range of students and how to support them more effectively. I hoped that by carrying out this research in a school that seemed to be positive towards inclusion and called itself a community school, that I would feel comfortable keeping the focus on teachers and their interactions with individual students on the AS rather than looking at possible leadership and school-wide barriers to effective inclusion.

Canterbury Primary at the time had ten students on the AS. As I worked there part-time I could schedule my research around working and the teachers' availability, within the constraints of working in a few other schools in the area as part-time teacher. The principal and Board of Trustees gave informed consent for the research to take place in their school and all staff were invited to participate. The principal and staff of Canterbury Primary seemed enthusiastic about the idea of taking part in this research when it was discussed during the 2009 school year. The

staff expressed their perceptions that I have expertise in the area of autism and teaching and learning, and were enthusiastic about the possibilities this research offered them to upskill. This may have been due to the fact that I had previously been the additional teacher for five of the school's students on the AS, and prior to that had been a special education advisor to the geographical region within which the school is. As a result of this I had known some of the teachers at the school for four or five years.

3.7.2 Myself as Participant Researcher

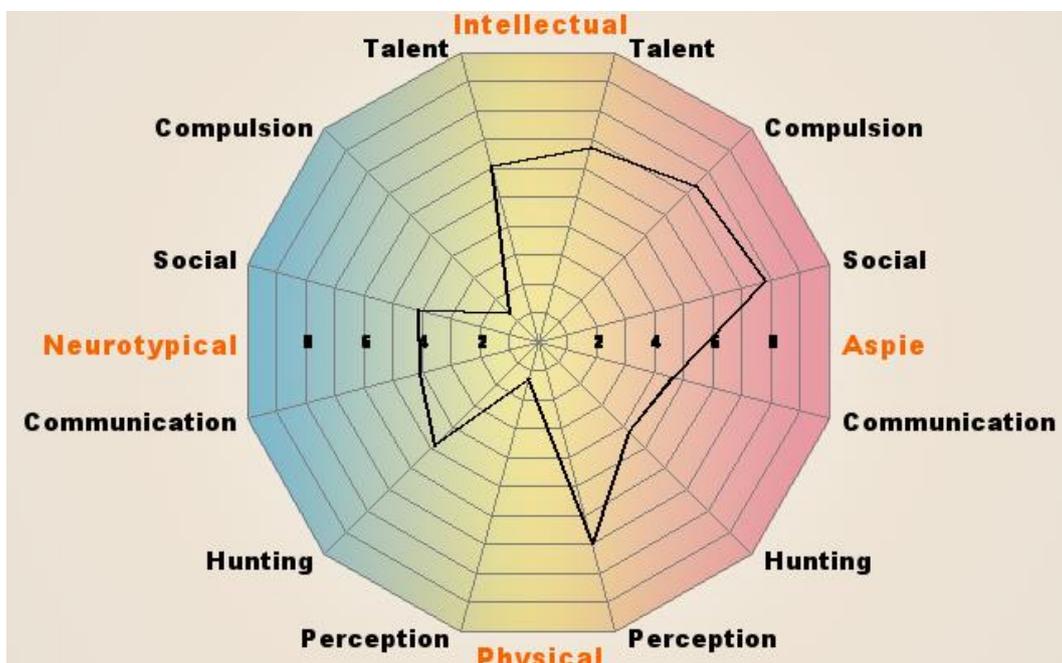
My world construct is informed by my multi-cultural upbringing in a variety of countries around the world and my being on the AS. I speak several languages and have experienced the different nuances that a change in language can bring to the situations I experience. When I can communicate effectively to a person in their first language, the resulting conversation and interpersonal relationship has time and again proven to be more fruitful and positive than when I rely on my first language. For me this has translated into a desire to communicate with students in their first language where possible, whether this is spoken, pictorial, signed or technology assisted. Alongside my own Asperger's, this means that I have a lived experience understanding of the frustration students on the AS may feel when they are in situations where communication is not meaningful or easy.

I am a trained teacher, with qualifications, experience and a passion for special needs teaching, no matter what the educational context. When working at within the Ministry of Education, in 2008, my job was to support schools and individual teachers to meet the needs of a variety of students with learning and behavioural needs. Prior to that I had been a classroom teacher and owned an educational consultancy for over ten years.

Not only do I enjoy working with students on the AS, but I also have Asperger's Syndrome, though this was not formally diagnosed until 2012, during my thesis writing. As part of my self-reflection during this research, I had taken the online tests developed by Baron-Cohen to look at my thinking and doing styles and then had a formal psychological autism screening. Figure 16 illustrates my neurological profile.

It has been suggested that the most effective interactions with people with Asperger's are those where both people interacting have Asperger's as they have a real rather than theoretical understanding of how the person with Asperger's thinks, acts and does (Attwood, 2011; De Clerq, 2011; & Peters, 2011). If this is the case, it would offer up an explanation as to why I have never experienced difficulties communicating with students with Asperger's.

Figure 16 – You are most likely an Aspie



<http://www.rdos.net/eng/poly12c.php?p1=67&p2=39&p3=74&p4=86&p5=78&p6=58&p7=46&p8=59&p9=42&p10=51&p11=70&p12=87>

My understanding of students on the AS is grounded in my sharing some of the characteristics which they may exhibit. I have sensory sensitivities to noise, touch and light, poor facial recognition, a preference for literal language and I find it very difficult to learn a new skill that doesn't interest me. Additionally, I apparently seem aloof and exhibit atypical emotional responses.

These characteristics may explain why I enjoy teaching students on the AS and seem to have a good understanding of the way these students think and behave. I think and behave in similar ways to other people on the AS. However, previous to embarking on this research, I had no concept of myself as someone with autistic characteristics and so had no concept that it may be difficult for some teachers to understand their students on the AS. I thought that because I could understand them, it must have been due to my training and further studies and therefore I thought that, provided with relevant skills and knowledge, all teachers would be able to understand and meet the needs of their students on the AS.

My perception of myself was that I had more experience of children on the AS than many regular classroom teachers, as well as having completed more professional development in the area of teaching and learning for all. I thought that I may have had a different attitude and belief system around the role of teacher in a classroom. I tend to focus on the individual and their social, physical, emotional and then learning levels and how I can influence (or increase) these by changing the environment or the way in which I teach.

At the start of this research I believed that I although having things to offer in terms of knowledge of autism and how aspects of autism can present themselves in the classroom, I had a lot to learn. Towards the end of the process this changed as I realised how different the

experiences of people on the AS are and how different their reactions and thinking styles are to other people. Now I more firmly believe that in order to understand why people on the AS act in particular ways one needs to have an understanding of the autistic brain and how it works and not just a theoretical knowledge of observable traits.

From my recent experience and knowledge of Canterbury Primary, the teachers and students, I suspected that I had more experience of asking questions about how and what to change, to try and meet the needs of students on the AS. I think that part of this is due to more experience and study in this area. I also have a wider experience of individualised curriculum planning and delivery in both Montessori settings and regular school settings both in Aoteroa/New Zealand and Europe.

I am a social constructivist, partly because I have quite concrete ideas and in my experience people think and act quite differently in different contexts and partly because I cannot prove the existence of 'one truth that inherently exists' but I can observe that there are many truths as understood and represented by many people. My understanding of knowledge as a social construct drove my choice of theoretical framework as well as my interpretation and representation of the data gathered during this research. I chose to use an activity theory based table system for identifying influential factors as this fitted with social constructivist viewpoints, was capable of handling complex contexts and was easier for me to use than statistical-analysis type frameworks.

3.7.3 *The Students on the AS*

The names chosen for the students are all gender neutral Maori names with meanings that had some resonance with the characters of those students. I chose to use Te Reo Maori names to place this research firmly in the context of Aotearoa/New Zealand where Maori are the tangata whenua (people of the land), and Te Reo Maori is one of the three official languages of Aotearoa/New Zealand, the others being sign language and English.

Additionally, the use of these names enabled me to place something important to or about each of the students within the name used for them in this research, without identifying them in any way. This enabled me to keep the thesis writing grounded in trying to represent the lived experience of the teachers and students, as their names were meaningful and representative. The use of gender-neutral names for all the participants and the pronouns they, their and theirs for he/she, him/her and his/hers, further helps protect anonymity. I realise that for some readers this can be difficult, however I am comfortable in reading, writing and speaking using gender neutral pronouns.

Table 6 - Student Pseudonyms and translations

	Marama	Tui	Paikea	Hari	Iorangi	Ira
meaning	Moonlight	Honeyeater bird	Tame whale	A colour	Cirrus cloud	Watchful

Children observed had a diagnosis of ASD (as evidenced by medical diagnosis or through prior evaluation using the GARS-2 and/or ADI-R by a special education advisor or psychologist). Of the six students being observed as part of this study, only two received government funding for on-going special educational needs (ORs) and therefore received both a teacher aide (between

seven and fifteen hours per week) and a specialist teacher (2.5 hours per week each). Two of the students received dedicated teacher aide funding from Canterbury Primary's own budget. One had some extra support in a small group doing phonics and the other no extra support apart from myself in my role as researcher, although I had worked with this student previously. I was the ORs teacher for the two students with ORs funding.

The senior students all participated in a social skills group run by myself, in my capacity as a part time special needs teacher during the 2010 school year. This group met once a week for an hour and a half for a term. This group had been requested by the SENCO following on from repeated requests from senior school teachers, whom the SECO reported felt ill equipped in terms of time to teach specific skills around social interactions to these students. I utilised a social skills programme recommended by another PhD student, which I prefer to use in class with the whole class, but the school programme did not allow for this.

Table 7 – Overview of the Students on the AS

	Marama	Tui	Paikea	Hari	Iorangi	Ira
ORs funding	No	No	Yes	Yes	No	No
Teacher aide	Small group	1:1	1:1	1:	No	Small group
Junior/senior class	Junior	Junior	Senior	Senior	Senior	Senior
Teacher	Māhita	Kaiako	Kaiwhakaako	Kaiwhakaako	Ahorangi	Ahorangi
Social skills group participation	No	No	Yes	Yes	Yes	Yes
Behind peers academically	Yes	Yes	Yes	Yes	No *	Yes and no *

Notes * Iorangi was in a class a year above their age, following a previous gifted and talented screening by the school. Ira had minimal reading and writing skills at the start of

2010, so on paper appeared behind peers academically, however Ira's knowledge of a variety of topics was exceptional.

Iorangi and Ira were able to communicate meaningfully with peers at times, but only on topics they wanted to talk about and only for a maximum of four exchanges. Both Tui and Paikea could participate in conversations with adults depending upon the context but struggled to communicate with their peers. Hari had the most limited oral communication with others, but the resulting communications were easily understood. Paikea was unable to respond to closed questions, and when Paikea did respond to a closed question the response was usually not understood.

3.7.4 The classroom teachers

The other four teachers were selected from a group of six teachers who volunteered to participate in this research by completing and signing informed consent forms. The selection was based on the time availability in their classrooms. The two who did not get to participate both had one day a week release time. I was the fifth teacher involved in this research. As well as my role as researcher I was also employed during the school year as an ORs teacher for three of the six students involved as well as a part time consultant for the first three terms.

Once teachers are fully registered they rarely receive feedback on their classroom teaching, so being involved in a research project such as this can be both challenging and rewarding. In initial discussions with teachers I also made it clear that I was not there to blame or to judge. I was investigating, among other things, what supports they as professionals wanted and needed in order to do the best that they could do, for their students on the AS. It was helpful that most of the staff at the school already knew me and had experience of working with me. I was told

later in the year that other teachers had wanted to participate but had been allocated other professional learning goals and so were not allowed to volunteer (personal conversations, 2010).

All the names chosen for the teachers are Te Reo Maori words with an English language interpretation of teacher; Māhita, Kaiako, Kaiwhakaako and Ahorangi. The teachers ranged in age and experience as well as cultural experiences and backgrounds. Māhita was the newest teacher, though still with over five years teaching experience, and was also the most recent arrival at Canterbury Primary. Kaiwhakaako, a teacher of over fifteen years, was rarely seen in the staffroom, whilst Ahorangi, who has been teaching for over twenty years, was nearly always in the staff room for morning tea and lunch. Kaiako, teaching for over ten years, and Māhita, being teachers in the junior school were often there for only part of a break as they were usually supervising toileting, hand washing and eating. I knew Ahorangi and Kaiwhakaako, but not Māhita or Kaiako, from previous years working with them to support other students.

With distinct personalities and opinions, each of these teachers appeared confident and outgoing most of the time. Kaiwhakaako and I had worked together extensively previously. We already had a good solid relationship, based on openness and trust, with a clear understanding that conversations were between us and not open for scrutiny by others. This research would bring about a change in that I would be documenting observations and conversations in my thesis. I also collated quotes and observation notes that clearly indicated a willingness or lack thereof, to teach their students on the AS.

Occasionally quotes will be used that are not explicitly assigned to one of the teachers. This is either where several of the teachers said similar things and the quote is a summary, or where to assign the quote would be problematic for that teacher, should other staff in the school read this research. All of the staff who were in Canterbury Primary during 2010 were aware of my research as they had all been offered the chance to participate and therefore it is feasible that they could identify a participant by specific phrases. I felt it was just as important to protect the identity of the teachers, to ensure openness and honesty, as it was to put forward some of their thoughts around controversial issues.

Teachers operate in a society that judges them as ‘good’ or ‘bad’ teachers, and work at schools in either temporary or permanent jobs, which can create pressure to “conform and just agree with everything management says” (summary of comments) so that one is more likely to be re-appointed. In order to maintain the existing trust and openness between Kaiwhakaako and myself, and to ensure that the other teachers could be open and trust me, I made it clear that they, as research participants, would get to see my thesis as a draft so that they could correct anything I had misquoted, or request changes to the writing if they felt this was needed. This was done towards the end of the 2011 school year via email.

The initial questionnaire data helped me to understand where the teachers were at in terms of their understanding of their students on the AS and how teaching and learning for these students could be framed. Table 8 summarizes this initial data, which was used for contextual background for my individual observations and conversations.

Table 8 - Initial knowledge and perceived needs of teachers as surveyed

	Māhita	Kaiako	Kaiwhakaako	Ahorangi
What are the three main characteristics of ASD?	Disruptive in the classroom	Difficulty communicating ideas	Social interaction is poor	Difficulties with social interactions
	Outside the box type of child	extremely literal	Language development (oral) is poor – echoes others repeats phrases over and over	Poor ability to make friends
	Interesting/unusual behaviour	Becomes obsessed by an idea or action Easily distracted	Fixations on items or movement or symbols/stims, requires routines	Difficulties with receptive /expressive communication
What kinds of support do you think teachers need in general to help them teach children with ASD?	Understanding. Practical support/ideas.	Understand indicators. Advice on how to differentiate the learning. Teacher aide time, working alongside.	Professional development. Opportunities to share ideas etc with teachers outside of own school environment. Strong home/school partnership encouraged.	Accurate, specific information and data. A listening ear!
What kinds of support would you like if a child with ASD was placed in your class tomorrow?	Understanding. Practical support and ideas to help 'fit in' happily at school.	Teacher aide time. Emma! (this is a reference to me as researcher)	More teacher aide time to take other children so that it would free me up to work with a small group of ASD or other high needs kids. Resource budget especially for Special Needs.	Accurate data about specific needs. Help to write realistic short term goals. Problem solving strategies. Cue sheets/tips/practical resources.
What kind of in-service training would you like in the area of ASDs and inclusion?	Practical suggestions and support.	Indicators of ASD – differences and similarities. Strategies to help understand and find out what works for that child.	Different approaches to looking at a problem that would help with resource creation or learning sequence/steps. That whole thinking outside the box. Ability to successfully engage the learner.	Practical information and support.

3.8 *Researcher as outsider/insider*

During the first five weeks of the school based research, it became apparent that although the teachers accepted me, they were not willing to share any perceived lack of knowledge or skills, until a deeper relationship based upon trust was established. Even teachers who I'd previously worked with wanted to get to know me on a more personal basis before sharing any information relevant to my research. This time period proved crucial in developing those relationships.

A general point raised... is that the degree to which a study is ethical or unethical is the result of a process of continuous interaction between the researcher and participant. This process must be based on an element of trust which may be built up through the participant finding the researcher approachable, communication that is two-way, a sense that the researcher is 'human' and able to reveal personal aspects of him/herself and assurances of confidentiality. Trust is the foundation of an ethical study. (Halasa, 2005)

This journey for the teacher to see me as 'human' resulted in conversations with me, on a one-to-one basis, with teachers wanting to know who I am, where I come from and how I live my life. None of these conversations had anything to do with my professional life. Upon reflection, I recalled a colleague in GSE, talking to me about working with Maori whanau (families). Their advice was simple; do not attempt to do any professional work until you have had kai and korero (food and a conversation). When I used this advice in the course of this research, conversations were longer and richer in terms of shared information and the development of co-constructions.

The traditional Maori world is an oral culture, hence the importance of the spoken word. A person's mana (explained in English as honour, authority, control, influence, prestige or power)

will increase or fall by the truth of their words. The sharing and partaking of food has significance in Maori culture especially when meeting and greeting new people. The importance of kai and korero is to find commonality created through some form of shared experience or shared knowledge. This is an important part of Maori culture, and I found it to be the best advice I have ever been given for working with anyone in Aoteroa/New Zealand. Looking back over all my data, I realised that the most open and insightful conversations always took place with food or drink present.

Those initial interactions with teachers were much more personal and in depth and very much about relationship building between us as peers, before we started to talk about the students. I felt that the teachers were ensuring that I was as open with them as they sought to be with me. This was interesting and challenging for me as I am professionally open, but personally very private – a self-constructed way of working in education that has previously served me well.

As a lesbian in the teaching profession this level of openness has not always been possible without negative feedback or consequences, so I struggled with aspects of sharing. However, this led to a deeper sharing of thoughts around teaching and learning, so I can see the importance of this pathway. As a guess I would say that trust is a key issue here. Teachers need to know who they are dealing with before they will share their insecurities about their professional skills. This is something I can intellectually and emotionally understand and empathise with. Additionally, sharing my vulnerability as a lesbian in education, enabled teachers to share their vulnerabilities in their professional capacities as they could see I was ‘just another vulnerable educator’ rather than an ‘outside expert’.

Participant observation facilitates the acquiring of the status of trusted person. Through being a part of the participants' classrooms I was able to observe first-hand how the actions of others were represented by their words. In addition I was able to observe "patterns of behaviour; experience the unexpected, as well as the expected; and develop a quality of trust with the other participants "that motivates them to tell you what otherwise they might not. Interview questions that develop through participant observation are connected to known behaviour, and their answers can therefore be better interpreted," (Glesne & Peshkin, 1992, p.39).

Due to my presence as a participant researcher and colleague working alongside teachers most of whom I already had a positive working relationship, there were few issues of rapport. There were however some personally difficult moments due to information being shared by teachers and the diametric positioning of this to my views on autism and teaching students on the AS. At these points I tried to clarify what the teacher was saying and that my interpretation of their thoughts was correct though the use of open questioning around why the teacher held these opinions.

It was important to be more reflective in how I interacted with the teachers because I had been very clear with the research participants that this research would not judge them as this research sought to understand and contextualise their views and actions. Bogdan & Biklen (1992), make the point that this reflection is particularly important if the role of the researcher has significance of some kind to the subjects. In this case it was as to preserve our collegial relationship.

The one thing that participants made clear to me is that ‘outsiders’ are not seen in the same way as ‘insiders’ and that a transition can be made from them to us by sharing and being open, taking time to get to know one another, finding common bonds however distant those bonds might be. In being open about who my partner is, what she does for a living and how our whanau is constructed; we found common bonds in a number of areas, and an acceptance of me that goes beyond ‘outside professional’ to becoming a member of the ‘school/work family.’

‘Outsiders’ were seen as those people who did not share themselves, but imposed advice or information without seeking to know the teachers or students as people. Cotner reported that in her experience “the degree to which researcher is accepted as insider depends on time spent, nature of inquiry, contexts of the research site, participants (including researcher’s) level of self confidence in their roles, *and* individual personalities.” (Cotner, 2000, p.2)

Sharing my ‘self’ seemed to enable me to cross from outside researcher to inside collaborator. This could be viewed as in accordance with feminist researchers such as Reinharz (1992) and Oleson (2003) who “advocated for the mutual creation of data between researcher and participants, seeing this as insider research” (Clingerman, 2003, p.77). One of the benefits of being seen as an insider was that I could ask questions with a strong sense of surety that I would get an honest answer. Additionally, I sensed that over time I was able to move to a more equal relationship with the other teachers as we reflected on our attempts to try and understand and meet the needs of the individual students on the AS.

During this research there was a huge shift in self-understanding for myself as a person and as an educator. When I started the research I knew that I seemed to have a good understanding of and relationships with students and adults on the AS and that many other teachers did not. I

presumed that this was due to more knowledge and experience on my part. However, towards the end of the writing up of this thesis, after I had received a formal diagnosis of Asperger's and had a number of new experiences I realised that the core difference between myself and the teachers who did not understand their students on the AS is our neuro-diversity. To clarify, for the duration of this observation and conversation research I did not fully identify as on the AS, and during the writing of the thesis I moved from thinking I had autistic traits to feeling that I was on the AS, to being fully aware of and celebrating my diagnosis of Asperger's. This has influenced that latter stage drafting as my interpretations shifted from those of a researcher/colleague to those of a person angry with some of the misunderstandings present in classrooms. I retained the vision to not judge but to present teacher voice by focusing on teacher's words and topics of our conversations rather than any observed actions that suggested fundamental misunderstandings of autism.

Having worked within Canterbury Primary for a number of years in a variety of roles, I had a working understanding of acceptable interactions with the staff and students and an existing rapport. This rapport was maintained through constant sharing of my observations and feedback of understandings gained from the research participants. Subjectivity was positioned through my dual roles as an insider, a participant observer and as a colleague. I used a process of reflection and feedback with the participants to ensure that I had recorded their thoughts and feelings accurately.

Through this research I aimed to discover how individual teachers felt, thought and acted in relation to the teaching of their autistic students, whilst sharing my experiences in this area. I did not have any preconceived answers to the best way to meet the needs of autistic students or the conflicts that might arise. In maintaining a focus on what the teachers said and did and

being clear about why and how I interpreted events and actions I strove to be aware of my subjectivity. However, I was also aware of my desire to advocate for the needs of autistic students to be met by their teachers and my insider understanding of how the autistic brain thinks and interprets the world.

I wondered how many of the observations I had undertaken as an outsider, when I was a special education advisor, were not representative of the results of everyday reality for the teacher and student. When planning this research I wanted to ensure teachers had a voice that would be heard, in relation to whether an observation I had done was typical or atypical. Both types of observation are useful, but for different things. An atypical observation can identify issues that arise during stress or illness for example, whereas a typical observation can highlight mismatches in curriculum presentation and student learning needs.

I wrote pages and pages of notes in notebooks, one for each teacher, accompanied by notes on loose paper, when I had forgotten my notebooks. I dated each observation and wrote start times and contexts, for example 19/2/2010 9am bell rings, class move to mat for roll. I also wrote short reflections every few weeks. I wanted to try and ensure that I was being reflexive.

Subjectivity and self-reflection are important aspects of qualitative research, as the self as researcher is an important part of the construction of the research and data gathered the interpretation of this data. It is through the researcher's "senses that information flows. It is through her senses that meaning is constructed from available data. It is through her senses that meaning is generated," (Lichtman, 2006, p.206). I understand now that my perseverance around comments or phrases is due to my autistic thinking style, however my attention to the small details has helped me to collect a large amount of data upon which I can persevere. In

order to ensure the meanings I generated were representative of the teachers' views and thoughts all the teachers were given several opportunities to make changes to this thesis if they wished to (Buchbinder, 2011).

“Reflexivity is researching myself and reflecting on my personal beliefs and values both as a researcher and as a member of the researched group,” (Hamdan, 2009, p378). This reflexivity can and did lead to discomfort when revealing negative aspects of my own professional group, as Hamdan explains it did when she exposed aspects of her cultural grouping. My aim was to tease out themes in the data, while trying to represent the observations as validly as I could, and then analyse the meta-themes and the standout data once the school year had finished.

This reflection has continued throughout the writing up process, with surprising personal insights arising from both internal reflection and knowledge acquired from other sources as part of this research journey. Positioning myself as an insider, I have continued to reflect on what it means to be a teacher in Aotearoa/New Zealand at this moment in time and how the meanings are ascribed to teachers by others as well as by ourselves. How we see ourselves as educators affects how we behave and this reflective practise has helped me to hear what teachers want from their support professionals in order to develop their own effective teaching practises.

I observed students in a range of teaching situations and was on occasion roped in to help teach, usually to ensure student health and safety. I was a very active participant in the research, even though I had set out to be a passive observer and sounding board to promote thoughtful reflection and discussion in the teachers. Teachers genuinely shared their thoughts and ideas to which I am grateful as this research could not have come to any conclusions without their kindness and willingness to learn and share. With their honesty and openness I developed a

wish to ensure that their identities were protected not just in the general sense, but specifically. I wanted to be sure that their senior management could read this research and not pick out who was critical or negative. To reiterate, some of the quotes are unattributed, as the teachers may seem identifiable to other staff within Canterbury Primary due to the groupings of age and numbers of students on the AS.

3.9 Outline of Findings Chapters

To summarise, this research aimed to examine the contexts within which teachers teach, in order to uncover possible contextual factors constraining or affording the effective teaching of students on the AS. The complex teaching context was explored using an AAT framework that could facilitate an understanding of the inherent tensions, contradictions and constraints placed upon those teachers.

Initial data collection from the questionnaire demonstrated a range of knowledge and early observations that supported my initial assumption that skills and knowledge level were a key contextual factor. Findings related to this are presented in the first findings chapter; Chapter Four; skills and knowledge. During this initial data analysis with the AAT framework, it became apparent that although teacher skills and knowledge were a factor in the effectiveness of the teaching of students on the AS, there was no apparent correlation between higher skills and knowledge and more effective teaching.

Further examination of the observations and conversational details put forward another possible reason why some teachers were more effective in their teaching of students on the AS than

other teachers. This reason appeared to be that teachers needed a willingness to effectively teach students on the AS, in order to carry out the actions that were required to teach these students meaningfully and therefore effectively. The exploration of the willingness of teachers using the AAT framework seemed to confirm the suggestion that there is a link between the level of effectiveness of teaching of students on the AS and the teacher's willingness to do this. The relevant findings from this idea will be presented in Chapter Five; willingness.

However, willingness did not in itself seem to account for the differences in observed action of teachers around what and how to teach. These actions seriously altered the effectiveness of the teaching of the students on the AS, from very effective to being minimally useful. Using the complex contexts present for the teachers on the AAT framework and factoring in willingness as a tool, it was possible to see that teachers were required to work with a variety of conflicting demands, the resolution of which directly influenced how and what teachers taught.

How and what these teachers taught seemed to be determined by their personal values and ethics. The data and analysis that informed this finding are presented in Chapter Six; Student focused? Some teachers were observed doing things that contradicted school or national policies, as they felt this was what was necessary to be student focused.

In the findings chapters, in order to present reflective snapshots of the issues that were important to some or all of the teachers, without imposing judgements, I used the AAT to classify contextual elements. Then I could present the conversations and contexts through the use of neutral classifications, hopefully providing enough information that the reader can understand why the teachers, myself included, made some of the comments and choices that we made. The activity theory concepts of mediators, affordances and constraints were used to

illustrate the interactions between elements within the complicated teaching contexts. It was particularly challenging to present enough information within each snapshot to ensure the readers were able to have a sense of context, without setting the scene in minute detail.

Conclusions and further discussions will be presented in the final chapter, where unanswered questions and potential avenues for further research will also be examined.

4. Chapter 4 Skills and knowledge – a foundation, supporting wall or minor factor?

Prior to commencing this research I had thought that teacher skills and knowledge would be the key factor in effective teaching of students on the AS in the mainstream (Bellini, 2010). I based this idea on the experiences of myself and colleagues working for Special Education, a subdivision of the Ministry of Education. My colleagues and I found that many teachers with limited knowledge of the AS struggled to plan for and teach these students effectively.

From the initial questionnaire, discussions and observations it was clear that all the teachers had some basic knowledge of the AS. I was interested in looking at whether teacher skills and knowledge were the foundations for effective teaching (Bellini, 2010) or a supporting wall of good practise. In other words, were teachers able to teach the students on the AS just as effectively with basic skills and knowledge as with more advanced skills and knowledge?

Using the AAT framework I analysed the idea that increasing teacher skills and knowledge would lead to the outcome of more effective teaching of students on the AS. Teachers said that their knowledge and skills had increased over the year; however, I would suggest that the teacher effectiveness in teaching students on the AS relies on more than that knowledge and those skills. Helps, Newsom-Davis, & Callias (1999) found that some teachers with experience of teaching students on the AS acquired an impressive understanding of the appropriate strategies to facilitate learning in children with autism, even though they were not always aware of the theoretical foundation for the use of such methods. This implies that is possible to have skills without understanding, which may raise implications for teachers who are asked to teach students on the AS who present very differently to those that they have previously taught.

During this chapter I will present an exploration of the complex teaching context and the data collected from relevant observations and conversations. The AAT framework highlighted some of the inherent tensions, contradictions and constraints placed upon those teachers and their ability to use their existing and developing skills and knowledge. This is represented visually in the following diagram.

Figure 17 - The AAT framework used to look at the idea that development of a teacher's knowledge and skills will increase effectiveness of teaching students on the AS.

Subject	Object	Hoped for Outcome
Teacher	Increased knowledge of the AS and skills in teaching methods to meet needs of students on the AS	Effective teaching of student on the AS

Contextual AAT Categories	Contextual factor details
Tools/Instruments	Available resources about the AS and teaching strategies (library, internet, conversations with others), IEPs, personal existing knowledge and skills, <i>professional attitudes, ethics and willingness</i>
Rules	National curriculum School planning and assessment policies
Community	Classroom culture, family/whanau support and involvement, community support groups such as AutismNZ
Division of effort/labour	Teacher, Teacher aide, ORs teacher, SE staff, SENCO, school management, professional development providers

Each of the contextual factors interacts with the others as well as the subject and object to mediate the outcome. Some factors hold more influence over teachers than others.

The AAT framework above illustrates the main contextual components examined to look at whether increasing teacher skills and knowledge did increase the effectiveness of their teaching of students on the AS. The items in italic were found to both hinder and support understanding and ability to meet the needs of students on the AS, depending upon the individual teacher. This aspect will be discussed further in Chapter Five.

4.1 Skills and knowledge required to teach students on the AS effectively

It has been suggested that the normal intuitions of effective teachers, such as the idea of linear learning and progression, may mislead when applied to teaching students with autism (Helps et al., 1999; Jordan & Powell 1995). It is thought that teachers require specific knowledge regarding the range of aspects of the AS, and a correspondingly flexible and facilitative approach to teaching, in order to achieve optimal educational outcomes for children with autism (Helps et al 1999; Jordan and Powell, 1995).

The United States' National Council for Accreditation of Teacher Education (NCATE) suggests that in order to be effective for all students, teachers need to develop knowledge about the students in their classrooms, their diversity, their families and communities (Ah Lee & Hemer-Patnode, 2010). This implies that without knowledge, even with skills, teachers will not be as effective as they can be.

Countering this idea Jordan, Glenn, and McGhie-Richmond (2009) suggest that the need for teachers to have specialized skills in regard to the teaching of special needs students may not be crucial for effective inclusion. They suggest that it is the teachers who are most effective

overall who are most likely to be effective in inclusive teaching. There is a caveat to this suggestion, with a strong link “between teacher beliefs that they either have or do not have responsibilities for instructing students with special education needs in their classrooms and the overall quality of their teaching practices” (Jordan et al, 2009, p.536).

Canterbury Primary senior management had already raised the issue of teacher effectiveness for their special needs students prior to this research, requesting whole school professional development/workshops on individual education plans (IEPs) and curriculum differentiation. Prior to the start of the 2010 school year, Canterbury Primary’s senior management perception was that the majority of teachers thought that the special needs coordinator (SENCO) and the ORs teacher were responsible for IEPs and the planning and delivery of any non-standard curriculum topics or lessons for special needs students. This situation may have been exacerbated prior to 2010 by the use of withdrawal groups planned for and in some cases taught by the SENCO and/or the ORs teacher. The senior school ORRs/ORs students were taught maths during the whole school maths hour, either by a teacher aide or the ORs teacher. For maths all other senior school students were streamed and taught in ability groupings by one of the senior school class teachers. That the ORRs/ORs students were not assigned a class teacher grouping like all the other students, but given work set by the non-teaching deputy principal, and then the ORs teacher and eventually by a teacher aide, could understandably have been interpreted by teachers as an indication that they were not responsible for the overall curriculum for these students.

It has been suggested that, for teachers to teach students on the AS effectively, they require knowledge of the effect of autism on the teaching and learning process, with an understanding that this effect is due to the autistic style of thinking, being and doing (De Clerq, 2011; Peeters,

2011). When carrying out observations, one of the teacher skills that I was focusing on was communication skills and the ability to use a variety of strategies to communicate effectively with students on the AS. The knowledge that underlies this ability to communicate effectively is an understanding of what visual and oral communication strategies are useful when teaching students on the AS and why (Jordan, 2001).

As can be seen from the following table, some of this knowledge and understanding was observed and/or presented by one or more of the teachers. For example; did the teacher gain the attention of the student with ASD before giving them instructions? Did the teacher use 1:1 communication to check student understanding of tasks? Did the teacher break tasks down into constituent components where this would be effective? Did the teacher use visual timetables or other visual supports to scaffold the learning tasks or times for the student?

Table 9 - Data collected relating to the hypothesis of correlation between skills and knowledge in relation to teaching students on the AS

Data sought	Data source – researcher observation	Data source – conversations & questionnaire
An understanding of the AS	Use of visual supports, structure present for student on the AS	Students on the AS have difficult behaviour, language and social difficulties and sensory issues,
An understanding of how the AS can manifest and how this affects the teaching and learning process – respecting the unique interests and learning preferences and styles of the student on the AS (Iovannone, Dunlap, Huber & Kincaid, 2003)	1:1 explanations of tasks, direct and clear instructions, use of sensory breaks, request for social skills group, allowance for student to present learning differently from the majority of the class	Language is used/understood literally, students can have fixations or obsessions
An understanding of the need to ensure students on the AS understand the tasks they are being asked to do	1:1 explanations of tasks, direct and clear instructions, using students special interest to introduce new topics	Receptive/expressive communication difficulties make understanding difficult for the student on the AS

Data sought	Data source – researcher observation	Data source – conversations & questionnaire
The skills to know how to support the student on the AS to know what they are meant to be doing and to keep the student on the AS on task - communication and the provision of a comprehensible environment for the student on the AS (Iovannone et al., 2003)	Visual support/directions (only observed for non-academic routines). Verbal first/then strategies, continual 1:1 verbal prompting. Use of physical prompting when required. Acknowledgement of stress/anxiety by teacher.	Need for student to have high levels of 1:1 support to start and stay on task and complete work with any level of understanding. Student may need sensory breaks between academic tasks.
The skills to know how to support the student on the AS to transition between activities	Warning about upcoming transitions. 1:1 reminder just after transition began. Use of peer support	Need to warn student of upcoming transition with clear, simple language detailing expectations.

An illustration of how relevant skills or knowledge were ascertained is given in the following quote from a conversation with Ahorangi. Ahorangi was telling me why Iorangi was off task during one of my observations. Ahorangi’s comments clearly demonstrated an understanding of the fact that students on the AS do not necessarily know when to pay attention to the teacher talking and can need this signalling to them.

“If I am explaining what to do to the class and Iorangi is not listening, I need to make sure to signal to Iorangi that this is something to listen to. If I don’t do that, then I shouldn’t expect that Iorangi will have any idea of what to do when I send the class off to start the task.” Ahorangi said.

“Does that mean that Iorangi didn’t listen to the instructions for this task?” I asked.

“Yes. There was a lot of class interaction when we were discussing this task and I didn’t get Iorangi’s attention before summarizing the task and sending the class back to their seats. Because there was lots of interaction before that, which Iorangi doesn’t seem to be able to follow, they probably switched off.” Ahorangi replied.

Ahorangi had been observed going over to Iorangi after the class were settled on task to give the task instructions again on a one to one basis. Ahorangi confirmed this was what they were discussing at that point.

All of the teachers were aware of the difficulties with transition that most students on the AS demonstrate and were often observed giving verbal warnings that one activity or task was drawing to a close and another was about to start. In contrast, the teachers struggled to understand the concept of 'literal language' comprehension and were observed giving instructions that lacked clarity. This led to situations where students on the AS were off task because they had not understood what they were meant to be doing, or that the task was compulsory and not optional.

4.1.1 Evidence that skills and knowledge support effective teaching of students on the AS

All four teachers said that they had previously taught children on the AS in primary schools in New Zealand and they all knew what ASD stood for; Autism/Autistic Spectrum Disorders. However, when asked what the three main characteristics of ASDs are the teachers gave quite varied answers, some of which indicated their past experiences of teaching children on the AS had not been completely pleasurable or easy. Māhita in particular gave me this impression with an initial and primary response that one of the main characteristics was being "Disruptive in the classroom." Although it can be true that children on the AS can be disruptive in the classroom (Helps et al, 1999) it cannot be said that this is a main characteristic of this group of children.

Kaiwhakaako had the most in-depth existing knowledge of ASDs, having spent a year already as the class teacher of one of the students with ASD. Kaiwhakaako actually listed four characteristics, one of which was framed in terms of a need rather than a deficit, which over the year became clear was how Kaiwhakaako prefers to frame students' learning needs; whether individual or group needs. Kaiwhakaako stated that children on the AS “require routines”.

This research was carried out over the 2010 school year. It was necessary to complete the research within the school year as the students and teachers change classes each year and so were unlikely to be in a classroom together over a two year period. The following table details the teacher knowledge at the start and end of the year, as obtained via the questionnaire.

Table 10 - Teacher knowledge of the three main characteristics of ASDs

	January 2010	Dec 2010
Kaiwhakaako	<ul style="list-style-type: none"> a. Social interaction is poor b. Language development (oral) is poor – echoes others repeats phrases over and over c. Fixations on items or movement or symbols/stims, requires routines 	<ul style="list-style-type: none"> a. Quirky & different socially (but can make friends) b. Repetitive behaviours (stimming & sensory issues) c. Hyperlexia & language difficulties
Kaiako	<ul style="list-style-type: none"> a. Difficulty communicating ideas, extremely literal b. Becomes obsessed by an idea or action c. Easily distracted 	<ul style="list-style-type: none"> a. Obsessiveness b. Violence c. Poor communication
Māhita	<ul style="list-style-type: none"> a. Disruptive in the classroom b. Outside the box type of child c. Interesting/unusual behaviour 	<ul style="list-style-type: none"> a. Odd behaviour b. Lack of social & emotional intelligence c. Lack of language
Ahorangi	<ul style="list-style-type: none"> a. Social interactions, ability to make friends b. Communication receptive/expressive c. ? 	<ul style="list-style-type: none"> a. Social interaction difficulties b. Communication difficulties c. Obsessive behaviours or interests

Table 10 summarises the teachers' answers in January 2010 that reflect the teachers' existing knowledge, whilst the answers given in December seem to reflect the teacher constructions of the characteristics of the students on the AS that these particular teachers taught over the 2010 school year. Being a spectrum the presentations of people on the AS can vary enormously, though the core of autism is often noted as the triad of impairment or difference/difficulty (Wing, 1988).

Helps et al (1999) found that teachers thought of autism as an emotional disorder and expected students with autism to exhibit challenging behaviour which is reflected in the views of some of these teachers. Kaiako's use of the word 'violence' as a descriptor of a main characteristic of ASD at the end of the year, indicated just how much Tui's verbal and physical aggression impacted upon Kaiako and the class. Māhita's experiences with Marama are no doubt reflected in the changing tone of behaviour descriptor, from interesting/unusual at the start of the year, to odd at the end of the year. Interesting and unusual are fairly neutral terms, whereas odd is slightly more pejorative. Perhaps these responses should facilitate reflection on my support of the teachers and how much energy and emotion is involved for them.

Where Māhita felt I could have been more supportive, "It would have been good if you took Marama for some more 1:1 work, or been here more often," Kaiako felt more supported, "I liked your feedback, it was really good to know what I was doing right."

The triad of impairment used as the framework for planning the education of students on the AS by the New Zealand Ministry of Education, is attributed to Wing (1988). Wing felt that in order to have a basic understanding of ASDs, one would need to know about the three main aspects of difficulties that people on the AS experience in comparison to neurotypical people (neurotypical (NT) people not on the AS).

This triad of impairments can be presented in a number of ways but basically covers the same three areas of development however it is presented. These are; difficulties with social interactions / interpersonal skills / social skills, difficulties understanding others, communications and communicating with others and difficulties thinking from another's point of view / difficulty with imagination / rigidity of thought and behaviour. It can be seen how these three areas are interlinked as they all relate to a person's ability to relate to, understand and interact with others.

These difficulties do not mean that a child/person on the AS can never understand or interact with others and/or develop a sense of imagination or the ability to see things from another's point of view. What it does mean is that for boys on the AS these skills need to be explicitly taught (New Zealand Ministries of Health and Education, 2008). Girls on the AS have been shown to be able to learn via modelling, so they need these skills explicitly modelled, (Attwood, 2012).

I observed that teachers who did not understand this were sometimes making value judgements about children responding in non-typical ways. For example Māhita would frequently get annoyed about Marama's non-responses to questions, stating that Marama "is so annoying, so frustrating, nothing seems to spark an interest, Marama doesn't even seem to listen." Māhita struggled to understand how the language/communication component of the AS affected all of Marama's thought actions and responses.

Marama observably struggled with social interactions and communication, unless the speaker was literal and gave short pieces of information and/or instructions. As Māhita did not start off

with an understanding that this is a main characteristic of ASDs (Wing, 1988) it is not unsurprising that Māhita did not attribute Marama's difficulties as being attributes of the AS, but instead as being behavioural. This lack of teacher knowledge affected Māhita's skills in teaching Marama initially.

An example of this was at news time; the students were paired up and each expected to give feedback about what the other student had said. Marama appeared to find this task both uninteresting and bewildering, with their facial expression during this activity either blank or confused. Indeed Marama would usually say, "I don't know what (*my news partner*) said". Māhita took this behaviour as rudeness and/or laziness, despite stating that Marama struggled with language processing; both expressing self and understanding others. This is one of the possible problems of a 'hidden difficulty', when a child appears to have no physical or cognitive impairments, then people generally expect that child to function in a typical manner and blame them for not doing so when they don't (Cook & Tankersley, 2000; Cook, 2004).

At this juncture it could be thought that the teacher had three conceivable avenues to pursue, when a child has replied "I don't know", to the request to repeat the other child's news, several days in a row. One would be to wonder if the child did not understand the activity or the question (language processing difficulty), another to wonder if the child had a hearing impairment, and another to wonder if the child had an attention deficit issue.

Having supported a range of students on the AS and reflected more upon myself, I realised that I had not considered a fourth option, relevant to many students on the AS. That option is that the student on the AS perceives the task as pointless or illogical and so will not participate in

the task. An example of this was one of my family member's refusal to do 'homework' as it was illogical.

“School work is done at school. When I go home it is my time and not school time. No-one should be doing school work at home. Why do they call it homework when it is school work?” (Family member, in their teens, in a personal conversation 2009)

In Marama's case though, the teacher Māhita, felt that Marama was being naughty and/or lazy. Māhita knew that Marama did not have a hearing difficulty as this had been checked, but thought there may be an attention deficit issue. However, Māhita could not perceive a lack of understanding of this daily task, which Marama had been taking part in since starting school towards the end of the previous school year. Marama did give an impression of low cognitive functioning in the classroom and the playground, with very little participation in group or class activities, and a facial expression that seemed blank. However, when engaged 1:1 in conversation about Mum, Dad or the earthquakes, or in a 1:1 supported writing task, Marama was able to participate in a task and engage in a meaningful conversation

This appearance of functioning at a higher level when engaged with topics of interest rather than other topics is observed in many students, especially those on the AS (De Clerq, 2011). Where students have obscure interests that have not been identified by whanau/family and then shared with the school, it can be very difficult for teachers to identify these interests. Marama's interests seemed to be very narrow and whanau/ family were unable to specify anything that Marama was interested in beyond building blocks, themselves and the earthquakes. This meant that it was extremely difficult for Māhita to engage Marama in order to provide an effective learning environment.

Māhita voiced the opinion, several times over the year, that Marama was passive aggressive, that Marama was rude and work avoidant, and Māhita took these things quite personally, despite having knowledge of the communication difficulties aspect of the AS. In my experience many people on the AS can seem to be rude and work avoidant, because they do not feel and act under the social constraints of neurotypical people.

For example Bob, a personal family friend, another teenager on the AS refused to analyse a film for his NCEA credits, because it was “stupid and pointless”. He was just giving his perception of the task, something that his friends seemed to just understand you didn’t do. Bob would not do any work he perceived as pointless, earning him the wrath of many teachers over the years. However, just telling him that he needed to do this because it was expected of him by society, in order to obtain any kind of above minimum wage job, was sufficient for him to see that it wasn’t pointless, ‘just stupid!’ I also demonstrated this trait of non-compliance in tasks that I deemed uninteresting or pointless when I was at school.

Over the year this aspect of students on the AS who do not complete a task because they cannot see the point in doing a required task, was highlighted and confirmed a number of times. Another aspect is that if told they *can* or *may* do something, these students ‘legitimately’ interpret the instruction as optional (De Clerq, 2011). Even for teachers with understanding of this, it can be extremely frustrating to need to justify every task, every day.

Marama would refuse to do any writing in the mornings, especially when asked to write a sentence without any prompting as to content. When Marama worked one to one and through conversation developed two or three sentences to write, Marama would write these. However, in class Marama would sit and do nothing, or keep asking Māhita how to write each word.

Marama did know the sounds and letter names but did not give any indication of this when in class. I had worked with Marama the year previously, when Marama first started school and knew that progress had been made – for example Marama now had personal name recognition, both written and verbal, which was not the case the year before.

Māhita had no knowledge of Marama prior to this school year and so could not see what progress had been made. It can be difficult for teachers to see very small steps being made by individual students when the rest of the class are making progress much more quickly (Bourke & Mentis, 2010). For example Marama could count to ten but was not consistently accurate. For a teacher to be able to pinpoint when Marama became accurate in counting to ten when the rest of the class were becoming skilled in addition and subtraction may not be possible without using periodic assessment tools.

The constant buzz of the classroom means that progress may not be seen as it is happening, meaning that teachers can feel that some students are not progressing at all. Bourke & Mentis (2010) identified that teachers who shifted their focus around learning and what it entails using narrative assessment were able to see progress that they had not seen previously. This shift in focus (though not using narrative assessment) occurred with Māhita and Marama and to a lesser extent Ahorangi and Iorangi, Kaiwhakaako and Tui. It is an example of teachers not having the time needed to observe just one student without having to be responsible for the whole class.

Skill in dealing with students on the AS seemed to rely not on knowledge of the AS but upon an understanding of why the students were behaving in the way they were behaving. During an observation, Māhita repeatedly called Marama to join the reading group for reading time. Marama completely ignored this, whilst flicking through a book. Māhita knew that Marama

was not always aware that their name being said meant attention was needed and so would be clear about the instruction: “Marama, it’s reading time.” “Marama, I need you to come here for reading.” “Marama, that’s you,” this was said with eye contact when possible. Finally Marama would finish flicking through the book, stand up, and retrieve the reading folder to go over to join the group.

If Māhita had understood that Marama, like many students on the AS, did not like to transition to *any* new task without having completed the previous task, Māhita could have communicated in a way that was more meaningful to Marama, ‘Marama, you need to put your book down now. (*Wait until book put down.*) Now you need to go and get your reading folder. (*Wait until Marama has reading folder.*) Now come and join your reading group, Marama. (*Once Marama has sat down.*) Thank you for coming to reading group quickly.’

Part of the difficulty for Māhita in developing this understanding, was that Marama would be involved and absorbed in self-chosen activities rather than doing the work required. Marama rarely did the work required, so Māhita could not see Marama’s need to finish one task before starting another. However, knowing that Marama interpreted instructions literally, Māhita skilfully got around the can/may issue by giving the class tasks in the following order; “these are you must dos;.....and when you have finished your must dos, these are you can dos.” Unfortunately Marama still would not do many of the ‘must dos’, particularly writing (news or stories) unless supported 1:1.

In contrast, Kaiwhakaako demonstrated an understanding of the students on the AS, talking about the why’s of behaviours or difficulties, rather than focusing on the behaviour. Paikea and Hari did not necessarily engage in a lot more formal academic tasks that Marama, but

Kaiwhakaako was less concerned with this than with providing a safe space for the whole class to grow and develop in their own time.

Kaiwhakaako: “We are doing acrostic poems at the moment, which Hari and Paikea enjoy listening to but the instructions to create them are really complex. Neither Hari nor Paikea can follow more than one step instructions, because they have processing difficulties as part of their AS. Hari doesn’t write meaningfully except for labelling so that’s why Hari is labelling pictures at the moment.”

Emma: “Why did Hari draw those particular pictures?”

Kaiwhakaako: “Because they are the things that were in the acrostic poems that I read and modelled for the class. That way they are integrated into what we are doing and Hari is not left out.”

Emma: “I noticed Paikea struggling with writing a poem, and repeatedly coming to you for more support.”

Kaiwhakaako: “Yes, that’s because I only gave one instruction at a time, and then Paikea needed to come back for the next instruction. This works really well to keep Paikea on task and focused because one of Paikea’s main motivators to work is to get a response from me that says good work! It is hard to find what motivates some children on the spectrum and it is great that Paikea wants me to be happy, how easy is that? Even so, I still need to break down the task and place it into the context of Paikea’s special interest of animals, otherwise nothing happens, there is no engagement.”

Kaiwhakaako was demonstrating knowledge of special interests and motivators in the AS but also an understanding of the power and influence of these. Kaiwhakaako rarely asked for practical input around skills or knowledge, except in the IEP context.

Māhita did request practical input from myself to increase skills and knowledge in teaching Marama, and I found through trial and error that written reports were not used. Māhita preferred oral feedback with clear thoughts on what was working and what was not, as well as what could be done to improve things. An example of this is shown below and follows on from a writing session where I worked 1:1 with Marama.

Māhita: “What do you think?”

Emma: “About what?”

Māhita: “About anything?”

Emma: “Well look at what Marama wrote this morning.”

Māhita: “Are you surprised? Marama can write, but the writing is appalling.”

Emma: “I think its ok” (for someone who lacks any interest in writing, I can read it, I can understand it)

Māhita: “But compared to what they are supposed to do” (shows me someone else’s writing, with much more neatly formed letters, clear full stops and capital letters to frame sentences and four or five sentences.)

I pointed out on the page where Marama had self-corrected after being directed to check the writing to see if it was right or if there were any mistakes. I reiterated the need for Marama to receive 1:1 direction. Māhita agreed that Marama “does far more when 1:1 directed. But Marama’s not that autistic, really, I mean it is a won’t do isn’t it, not can’t do?”

Emma: “No, in that Marama can talk, can function, but Marama is different and does need a different teaching method from the others to learn. Also just because Marama

can do a task doesn't mean that Marama understands what task you are requiring at that moment.”

Māhita: “You'll have to tell me. I think Marama is failing to thrive and not able to focus. Marama is not making any progress, though I have to say Marama knows most of the letters now.”

Part of the issue raised here is related to skills and knowledge, but on closer analysis it was mainly an issue of time. As an outside observer I had time to observe Marama and Marama's interactions with Māhita and to see how Marama's AS was affecting learning and functioning in school. Māhita did not have that opportunity, as there was a room full of other students who also required teaching. I (and other external support/advisory professionals) have no responsibility for anyone in the class and so can focus on detailed observations of student and student – teacher interactions.

A teacher is not only teaching the class, but responsible for the health and safety and wellbeing of all members of the class. During the period observed above, Māhita had another child in the class that raised significant safety issues, requiring a great deal of urgent input. This child moved to a school in North Island part way through the year for family reasons. Māhita did not have the luxury of being able to step away from the role of teacher, in order to spend time observing the details that would have provided a clearer understanding of Marama and Marama's abilities, needs and fixations in order to plan to meet these needs. This accords with findings by Blecker and Boakes (2010), that teachers identified a need for more time to plan effectively for students with extra learning needs.

Ahorangi taught older children than Māhita. The class required as much if not more behaviour management, but less explanation of tasks to be completed. Because Ahorangi had been at

Canterbury Primary a number of years, there was some existing knowledge of Ira and Iorangi. This was through having taught them during various interchange classes. Additionally, Ahorangi knew who had taught the students previously, what their teaching style was and how this could help to interpret information they provided about these students.

Ahorangi started the year understanding that Iorangi would present with challenging behaviours when anxious or distressed, as this was the pattern from the previous year. Unfortunately, Iorangi was experiencing some difficulties emotionally at home and this was affecting behaviour in school. Ahorangi worked with the family to try and find a way forward, but over the school year found that Iorangi became more anxious about the end of the year and so seemed to regress in terms of behaviour and the amount of work started in class.

Iorangi demonstrated higher cognitive functioning in terms of the formal curriculum than same age peers and had been put up a year previously, in response to a gifted and talented screening, carried out because of behavioural and social difficulties within the chronological age class and conversations between family/whanau and school. Unfortunately Iorangi really struggled with social interactions with any age students, preferring to interact with adults. This created a social barrier and contributed to Iorangi's anxiety in school (Peeters, 2011).

Ahorangi: "Iorangi is highly intelligent and should be able to shine academically, but that is not happening. Iorangi will not participate in learning tasks when anxious. I know this anxiety is related to past events as well as things in the here and now and even worrying about the future, but I can't change these things. I would really like Iorangi to get some support around anxiety and to develop social skills."

Ahorangi worked very hard to support Iorangi and received no support, other than myself as researcher, throughout the year. Part of this support was to provide a social skills group in

which Iorangi participated. When Iorangi resorted to behaviours that Ahorangi thought had been worked through and had gone forever, it was frustrating for Ahorangi.

Ahorangi: “I thought we had worked through all this, its as if everything is going backwards. Iorangi is doing all those things that haven’t been seen for over six months, hitting out at others, leaving the room all the time. Agggh, I just don’t know why.”

Emma: “Iorangi is under a lot of stress currently and this stress makes daily life more difficult for them. Where Iorangi was able to manage to keep it together, its just too difficult right now. When things are less stressful, or if we can find ways to help Iorangi manage the major issues that are causing the worry and stress, then Iroangi will show less of the behaviours that are difficult.”

Ahorangi: “But Iorangi had learnt replacement behaviours and isn’t using any of them anymore....”

The skills in terms of strategies employed by Ahorangi to meet Iorangi’s emotional needs were significant. Demonstrating and discussing knowledge of Iorangi’s social anxieties and resulting behaviours Ahorangi said, “Because Iorangi has no idea how to get along with the class, Iorangi is doing things that may well have been successful in gaining acceptance four or five years ago. Unfortunately these are completely inappropriate at this age and with these peers.”

These conversational extracts demonstrate a good knowledge of Iorangi and of aspects of the AS. However, Ahorangi did not seem to understand that stress and emotional overload in general can be extremely difficult for people on the AS to manage and that in times of extreme

emotional stress many are unable to use taught strategies, which could explain why adults on the AS still experience meltdowns.

Ahorangi was a key factor in persuading the school to set up a social skills group, so that Iorangi and Ira could learn the basic social skills that they needed to be able to get along with the class and develop and sustain friendships (Coucouvanis, 2005). Before this social skills group was set up, Ira would bang people on the head to get attention, which would create annoyance and resentment among those being banged. Once Ira had some basic skills scaffolded and the opportunities to practise these, the banging was almost eradicated.

Ahorangi had a good understanding of how Ira and Iorangi's communication difficulties affected their learning and ensured that these two students understood not just explicit, but implicit class instructions and information. This can be illustrated by the example below, observed in March, 2010.

Ahorangi: "I'm going to go through wet play routine. It's the first time we've had wet play in a long time. Hands up if you're a wet play monitor (*sixteen people put their hands up*). That's sixteen of you. Now what do you do?"

This was followed by a question and answer session with the class. The need to go to the toilet and then wash your hands during play time was mentioned by several students.

Ahorangi then turned to Iorangi, who often forgot to go to the toilet at breaks and asked, "When do you go to the toilet if you forget to go before the bell?" Iorangi responded, "Go quickly when the bell goes." "That's right, go to the toilet quickly when the bell goes. Wash your hands then come back to class," said Ahorangi, reinforcing the message.

During another session in July, Ira had a cough and was just coming to terms with a serious illness within the family. Ira was coughing during a writing task.

Ira looked at Ahorangi and said, "I guess I cough every minute."

Looking concerned and sounding caring, Ahorangi asked, "Ira, does it bother you?"

Ira said no.

Ahorangi understood Ira's literal use of language enough to know that this only meant that the coughing was not bothersome, but the fact that the coughing had been brought up meant that something around this was causing frustration, anxiety or stress to Ira. Ahorangi sought to clarify what practical input Ira was seeking, "Ira, you have a bit of a cough this morning, so I'll put a box of tissues on your desk."

Ahorangi also took some alcohol hand sanitizer over to Ira's desk and cleaned the surface (Ira generally would 'over wash' hands and was fixated on preventing germs). This did not get any response, so Ahorangi said that Ira could use "the hand sanitizer after coughing, now that you have a cold." Ira beamed, jumped up, picked up the hand sanitizer, washed hands and sat back down.

This exchange demonstrated Ahorangi's understanding and knowledge of Ira's communication difficulties, germ fixation and the need to find the right question, statement or action to ensure understanding of what Ira was wanting to communicate. For a teacher who had less understanding in this area, they may just have responded to Ira's initial comment with a quick, yes or uh-huh. Ira would not have had needs met (to sanitize hands) or had a positive and meaningful interaction with the teacher. This was one of the observations that signalled to me that understanding is at the core of skills, whereas it is possible to have knowledge without understanding.

Until the school camp, Kaiwhakaako found that Paikea made little or no perceived progress academically or socially. This perception was changed after the school camp, which I also attended as a support person for Paikea.

Kaiwhakaako: “Paikea’s can’t answer yes/no or any short-answer or closed-question meaningfully because of communication difficulties. I don’t know why this is, but it is. It is amazing really because Paikea can tell me a story about mum, dad or the pets but can’t answer a question about if it is raining or not.”

Emma: “I have noticed that too, it is almost as if Paikea can’t process closed questions and so randomly picks a yes/no answer. What have you changed in the way that you talk to Paikea?”

Kaiwhakaako: “Well, most importantly I think that in order for Paikea to be comfortable and so able to make progress, there needs to be a sense of belonging to the class. Before camp this wasn’t there and I couldn’t see any progress in any area for Paikea, but now, wow, its so different.”

Emma: “What happened at camp? Why do you think camp made such a difference?”

Kaiwhakaako: “Well, I think that Paikea developed a sense of belonging and the class certainly started to accept and value Paikea as one of them. I mean, there were always kids sitting with Paikea to eat, and asking Paikea to be in their group for the evening activities. I think that you hung back and provided support to Paikea’s group rather than just Paikea made them see what Paikea could do and in a relaxed and fun context. The water slide was hilarious.”

Emma: “Ummm, I hate water slides, I am afraid of them, so once I’d got Paikea into togs and to the top of the hill, I said I’d go down to the bottom and take photos of the kids as they came down, that way I didn’t have to go on the water slide! The others decided who was going to go first and their excitement and enthusiasm carried Paikea along, they seemed to really form a group. The photos were awesome, such big smiles. Paikea’s

mum was thrilled. But, how do you think that made a difference to the classroom and learning?”

Kaiwhakaako: “I think that Paikea didn’t need to spend all that energy and effort trying to be accepted and fit in to the class after camp, but just knew that they belonged now. Instead of continually interrupting the class all day long, Paikea became content to try and complete tasks with my or a buddy’s support. Before there was a lot of ‘look at me behaviour’ and this has just gone since camp.”

Emma: “Do you think Paikea changed or the class or both?”

Kaiwhakaako: “I think the class realised that Paikea was a whole person with attributes that they hadn’t seen before, like a sense of humour and kindness. I think that they stopped seeing an annoying kid that didn’t make any sense and saw another peer, with strengths and struggles, like they all have. I think Paikea gained in confidence and also is happier. Who wouldn’t be, everyone needs to feel they belong.”

This insight was particularly interesting as one of the reasons that I had not accepted that I might be on the AS was that I did care what others thought and I did want to belong, but had understood from my training that people on the AS do not have these thoughts and feelings. Kaiwhakaako opened my eyes to what adults on the AS told me over and over again once I became a part of their community in 2012.

School wide knowledge around the AS led to a school policy that visual timetables must be used in every classroom. The rationale behind this was that a daily visual timetable is a critical component in a structured environment as it tells the student on the AS what activities will occur and in what sequence.

Visual schedules are important for children with ASD because they do the following:

- Help address the children's difficulty with sequential memory and organisation of time
- Assist children with language comprehension difficulties to understand what is expected of them
- Lessen the anxiety level...and thus reduce challenging behaviours
- Assist students with transitioning

(Pierangelo, R., & Guiliani, G., 2008, p.43)

All the teachers in this study did have some version of a visual timetable up in their classroom, though some were clearly used more frequently than others. Kaiwhakaako had extra visuals for Paikea and Hari, for use in scaffolding new or changed routine tasks, like the morning routine from arriving to roll call. Ahorangi's visual timetable relied on words rather than pictures as this was deemed appropriate for the class (and was suitable for the students on the AS in that class).

I could not ascertain if Kaiako and Māhita used their visual timetables daily or not, though they were certainly placed in an easy-to-view spot on the classrooms' whiteboards. The icons were changed from time to time and I did on occasion observe a session where the students were being directed to the visual timetable to confirm the day's activities. This variation in usage demonstrates that even when there is collective agreement around the usefulness of a strategy, that the strategy may not be implemented. I would suggest that this may be due to the knowledge base not being enmeshed with an understanding of how life is experienced by people on the AS.

Kaiako: "We have the timetable up, it's on the board, but I often forget to change it if there things that are going to be different. I don't have icons for all the extra stuff that we do, like when we have tennis, I don't have an icon for that, which means I have to go and

make one, print it out, cut it up, etc etc. I know that sounds petty, but there are so many other things that I have to do, it's just not a priority and I have to say, Tui doesn't ever to engage with the visual timetable anyway.”

As indicated by Kaiako above, the use of a visual timetable is habitual it can be viewed as taking up more time than it is worth. One of the issues for Canterbury Primary was that all the teachers were free to choose the style of visual timetable and the icons that they wished to use. Some teachers used picture exchange communication (PECs) icons provided by the speech language therapist from SE and others found some online. It would have been more useful for the students if there was one set that was used throughout the school. These could have been kept in the resource room for photocopying when needed or on the shared teacher file on the school network. This could also have avoided the issue of each teacher needing to keep updating their visuals.

Comments from teachers: “It's just school policy, we all have to use the visual timetable. I don't really know why.” “I forget to change the visual timetable because no-one really uses it.” “The class are too old to have pictures for the timetable, I just write up what is happening every day.” “I don't like the pictures that some of the other teachers use, I like these ones, and I like to print them on bright card, it looks nicer.”

When the younger students changed teachers at the start of the year, it was clear they did not recognise all the icons on their ‘new’ visual timetable. This created some anxiety for these students, who needed to relearn the meanings of the icons. If the teachers had understood the reasoning behind the use of visual timetables, they may have been more amenable to using a standard one, which could have facilitated a more consistently understandable experience of school for students on the AS.

When teachers met their students at the beginning of the year, they spent time getting to know the students during the first few days through explicit ‘sharing’ activities and observations and time spent explaining the visuals in use in the new class. Some teachers also read reports (where applicable) from the previous year(s) and/or talked to the previous class teachers and or families/whanau.

4.1.2 Did the teachers utilise families/whanau as a source of skills and knowledge in teaching students on the AS?

The relationship between teacher and student was clearly important to all the teachers in this research, who all said that they felt this was an important part of being able to be an effective teacher. However, the importance of good, open and honest relationships with the students’ families/whanau was highlighted by differences.

For students on the AS families/whanau can be a source of knowledge around the student’s behaviour, sensory sensitivities, like and dislikes, and communication details (De Clerq, 2011; Peeters, 2011). For example, Paikea’s mother provided a large amount of written information about Paikea’s AS diagnosis and what this meant for Paikea, including sensory sensitivities.

It is important to note that although I met in person with at least one member of each of the families/whanau of the students on the AS taking part in this project, to ensure that consent given was truly informed consent, the families/whanau all viewed their children very differently. One of the families/whanau, having signed up their child to be part of this research project about teaching students on the AS, was still in the early stages of accepting their child’s

diagnosis and so their conversation input varied between denial and acceptance. One family accepted and even celebrated their child being on the AS. At IEPs this family would talk about the skills of focus and detail that are a part of AS thinking and doing. Different levels of engagement with the school, teacher and myself were held by all the families/whanau. I met at least once a term with five of the six families/whanau during this research.

My involvement complicated the process of trying to understand if teachers saw families/whanau as a source of skills and knowledge and/or interacted with families/whanau in a way that demonstrated this. Therefore teacher perceptions about the importance of families/whanau were ascertained mainly through conversations and checked against observations of interactions or attempts to interact. All four teachers worked hard to build relationships with the families of all the students in their care. This may have been down to personal beliefs or it may have come from the school ethos, clearly put into practice by the principal and other senior management staff, or a combination of both. This ethos is encapsulated in the idea of a 'being a community school, that belongs to and supports the community'.

"The Principal works really hard to engage with families where students are struggling for whatever reason and we haven't been able to work with the family. I mean the Principal even goes round in the morning to pick a kid up if that's what it takes," said Ahorangi.

Through my attendance at Canterbury Primary school's pastoral care meetings, it was clear that the school took a very strong position on supporting not only students, but, where needed, their families/whanau too. However, if there was a conflict between what the adults in the family/whanau claimed they wanted or were capable of and what the child needed in order to

attend school in a manner supporting success the principal was very clear that the child came first.

An example of this relates to supporting students with ADHD where the families felt that they were not capable of obtaining and giving the medication to the child. Canterbury Primary collects the prescriptions for these students, gets them filled, stores the medication at school and gives it to those students. This ensures not only that the medication gets to the right child and is not abused in the home or sold on to others, but that the child is set up for learning each day.

Marama's family were perceived by Māhita as "middle class parents, who should know how to raise a child". However, it became clear through a number of meetings with the family, in which I was involved, that Dad had similar personality traits to Marama. Marama's Mum was open about the fact that she was often highly anxious and distressed which led to a better understanding of her by both Māhita and myself. Unfortunately Māhita's view over the year became one of annoyance with Dad, because "he doesn't want any support for his child".

Māhita felt that "parents do in theory know their children better than we do, but it's really hard to work with parents that say they don't want any support for their child and won't accept their child is struggling."

Māhita may have felt that their role as a teacher was being dismissed by Marama's family/whanau. Despite this Māhita demonstrated commitment to seeking out the family/whanau's knowledge, continuing to work with the family/whanau throughout the year, both alone and with me. Māhita continued to make positive suggestions and Mum even started the Incredible Years (parenting) course. Unfortunately Marama's mum did not finish this course as she was badly affected by the September Canterbury earthquake in 2010.

Despite Māhita's persistence, trying to ensure the family understood just how much Marama struggled with school was "an uphill battle". Marama's father stated that Marama was "just like me as a child, there is no need for any extra help or support. I failed at school and I'm doing ok now." This perceived lack of support from the family for Māhita's work with Marama made it very difficult for Māhita to help Marama make progress and was a source of frustration. When a family seem to express the view that they do not care that their child is not making progress, teachers can be left with a sense of bewilderment.

Māhita reported that "it is a really big problem that the family don't see Marama's difficulties. That they won't accept how far behind the rest of the class Marama is. I can't put any extra support into place because the family don't want it, it's so frustrating."

Māhita found this particular situation so frustrating because Marama's family had signed the informed consent for Marama to be part of this research into effective teaching of students on the AS, implying they accepted that Marama was on the AS and therefore required "extra support to achieve". I met the family several times over the year and could understand Māhita's frustrations with them, as well as their position, too. Marama's father felt that primary school was not going to be where Marama succeeded, as he had not. He was not worried because he had gone on to university and had a successful career, which he saw as Marama's future.

It seemed to me that Marama's father understood that skills and personality traits valued in the workplace are quite different to those valued at primary school. This meant that Marama could indeed be a highly valued worker, in a single focus job, whilst not being seen to succeed during the primary school years. I also believe this to be the case for students on the AS who can find school to be a difficult experience with all the constant stopping and starting of a range of

activities daily. In talking with Marama's father it seemed to me that he viewed Marama's strengths as important and assumed that this would compensate long term for the difficulties Marama was having.

If I had known that I had Aspergers when I was taking part in these conversations I suspect that I would have said very different things and supported Māhita to rephrase what was being suggested as supports for Marama, rather than using the words additional or different. I would have understood why I was experiencing the internal conflict that was caused by my accepting both viewpoints as valid. However, for Māhita and Marama's future teachers this attitude may well be seen as undermining their efforts to help Marama develop all the skills possible, which was how Māhita felt. I am left with a sense that I should have gone into this in more depth, despite the uncomfortable state that I was experiencing, that this difference in opinions was a lot more important than I noticed at the time.

Kaiwhakaako lived locally, knew many of the families and expressed the view that "kids come to school from home, home affects how they are thinking and feeling. If I know what's going on at home I can be better prepared to support the kids." This was proved to be true during the illness and death of the mother of one of the students in Kaiwhakaako's class. Kaiwhakaako however, struggled with Paikea's mother. Paikea had come from another school where the level of written work appeared to be considerably higher than the work that Paikea was producing at Canterbury Primary. Paikea's mother worried that the move between schools had been so stressful that Paikea's learning had taken a step back, whereas Kaiwhakaako, myself and the special needs co-ordinator all suspected that Paikea's previous work was teacher/teacher aide completed.

“There is no way that Paikea did the work in those books alone. I mean look, Paikea is not able to follow simple instructions to write a word beginning with a specific letter that describes *their best friend*.” Kaiwhakaako

I was observing this session, which involved the students writing an acrostic poem about their best friend. Most of the students in the class knew what an acrostic poem was, but Kaiwhakaako made sure to explain it in several different ways, each one simpler and more clear than the previous one. Additionally, even though animals were Paikea’s special interest Paikea had recently started to be interested in talking about and writing about other class members. Kaiwhakaako had taken this into account in modifying the task to be focused on Paikea’s best friend.

Paikea’s explanation was:

“Write down Katie. Katie is your best friend. Write Katie down the page, one letter on each line. What is the first letter?” (*Pause for response K.*)

“Write the K on the top line. What is the next letter?” (*Pause for response of I don’t know*)

“Why don’t you ask *Katie* to help you write her name? Write one letter on each line, down the page.” (*Pause for this to be completed.*)

“Great work. Now think about Katie. What words could you use to describe Katie? You need to choose a word for each letter. What is the first letter you need to use?” (*Pause for response K.*)

“That’s right, K. What word starts with k that can describe Katie. What word that starts with k tells you something about Katie?” (*Pause for response “sparkly”.*)

A difference therefore was present in expectations of learning and work for Paikea between the teacher, Kaiwhakaako, and Paikea’s mother, who felt Paikea was capable of writing page long stories unaided. This difference was clearly present during IEP meetings throughout the year. Paikea was dual-enrolled for Maths and English with the Correspondence School (a distance

learning initiative for rural/homeschooled and/or special needs students in New Zealand/Aotearoa). This continuity between the two schools meant that Kaiwhakaako could liaise with the Correspondence school to determine that Paikea was making progress and not going backwards, in those two curriculum areas.

The feedback from the correspondence school aligned with Kaiwhakaako's thoughts on Paikea's literacy and numeracy skills, but Kaiwhakaako always agreed with Paikea's mother that the discrepancy in work levels "may well be due to transition difficulties." I wondered why Kaiwhakaako did this, and in discussion found out that Kaiwhakaako did not want to challenge Paikea's mother's views about Paikea's abilities.

Kaiwhakaako: "Paikea has so many medical problems, its not just being on the spectrum. It is likely that Paikea has a much shorter life span too, why would I cause mum more distress than she already experiences. Hopefully Paikea will get to the level mum thinks is possible this year, but if not, better to blame me than to be distressed about it."

Emma: "I think it will be a few years before Paikea could do the sort of work mum has shown us in those old school books, not just this year."

Kaiwhakaako: "I know, I agree, but, hopefully the good things that happen over the year will overtake in mum's focus and we can all start to celebrate success and progress like we do with Hari and Hari's mum. Look at how different our meeting was last week after Paikea had an invite to play from a peer at the weekend. Mum was thrilled."

Emma: "I know, she said that in the whole four years at the last school Paikea had never had an invite to another child's house, not once!"

This experience highlighted another aspect of teacher and teacher aide skills, knowledge and expectations that I had not thought about prior to this research. When parents want to see

‘work’ brought home by their children, how much support do schools give to students to ensure that an ‘acceptable volume of work’ is taken home. Canterbury Primary had a policy of ensuring that students did their own work, with verbal prompting to start and stay on task.

Students who could not read or write were supported, when funds and time allowed, with extra tuition and access to Clicker 5 (a computer programme that supports writing/typing). If teachers or teacher aides scribed for a student, that would be noted on the work. Other schools may make different choices or may not note that a student had copy written an adults writing, for example.

Parents cannot see the true skills and needs of their children if work brought home is not annotated by the supervising teacher or teacher aide, indicating what the student themselves did, and what they had help with. Paikea’s mother was convinced that Paikea’s unmarked work from the previous school was all done unaided, and Canterbury Primary were convinced that Paikea was not able to do that level unaided. The previous school declined to comment. A long term relationship between school and family/whanau can ensure that good communication takes place to prevent issues like this arising.

Kaiwhakaako had known Hari’s mother for several years, having taught Hari and Hari’s sibling previously. Hari had always attended Canterbury Primary, whereas Paikea had moved from another part of the country, attended another primary school and then started Canterbury primary at the start of the 2010 school year. IEP meetings with Kaiwhakaako, myself, Hari and mum were always filled with smiles, laughter and celebrate. Hari’s mum embraced every step Hari took and would often talk about how much progress had been made over the term, year or years.

Kaiako did not know Tui's family as Tui was the oldest child in the family and the family were new to the school. Kaiako's previous position was with a programme for students with severe behavioural needs, and Kaiako was clear about the need to work with families where possible.

Kaiako: "I can't make the parents work with me, but if we all work together it is so much easier for the child, so much better. If I am teaching one thing at school and the family another thing at home, it makes it so much harder for the child."

Tui's family understood and accepted Tui needed extra support for learning and behaviour, but they did not express any desire to engage with Kaiako or the school despite many offers. I only talked with the family once, despite having worked with Tui over a period of two years in various different capacities. This is not to imply a value judgement upon the family who were engaged with a number of other support services outside of the education system.

Ahorangi taught the oldest students in this research, so had less opportunity to chat with families before or after school, as many students arrived and went home by themselves. Despite this Ahorangi would contact families via notes, emails and phone calls to arrange meetings with families of students with special needs or those who were cause for concern.

The Vermont Rural Autism Project (VT-RAP) used a family centred, strengths-based model to try and change service delivery models for young children on the AS in rural Vermont. The VT-RAP project found that "understanding that families have expert knowledge on their children was an essential element." (Beatson & Prelock, 2002, p48). From a school or teacher's perspective the difficulty with this seemingly obvious statement is that some families do not have a

complete understanding due to misinformation or misunderstandings, while some families are unable or unwilling to share their knowledge with schools and teachers.

Paikea's mother had actually written a large number of notes about Paikea's strengths and needs when Paikea transferred to Canterbury Primary. There were about eight or nine sheets of A4 full of information, giving a wealth of background knowledge to Kaiwhakaako, myself and the SENCO. However, some of this information was demonstrated to be incorrect in the current context as Paikea settled in to class and clearly could not follow instructions or respond accurately to simple yes/no questions.

Despite the difficulties experienced teachers in meeting with and sharing information and experiences with some of families/whanau the teachers, it was clear that all the teachers in the project did see parents as a source of information, knowledge and skills relating to their child on the AS. The quotes below illustrate some of the ways teachers utilised family/whanau information sharing.

Kaiwhakaako: "It is good to know right off the bat when Paikea is unwell, I'd hate to think of Paikea being in pain and my not recognising it as such."

Kaiako: "When Mum says she finds it hard to manage Tui's behaviour at home I can seize the opportunity to share the knowledge we have developed about what works here. Months later Mum may come back and tell me if something is now working at home, like the dolls. I'm amazed Tui likes dolls so much that they can be used as a reward."

Māhita: "It's good to know Mum is struggling with the earthquakes, and that Marama is worried the roof will fall in, it means we can work on this in class and try to ease that anxiety."

Ahorangi: “Mum and Dad have really different understandings of Iorangi, and then step mum brings up some really good insights into how Iorangi and Dad are similar and how she deals with those issues.”

The above quotes led me to believe that the teachers wanted to meet the needs of their students on the AS, but were not always aware of what those needs might be.

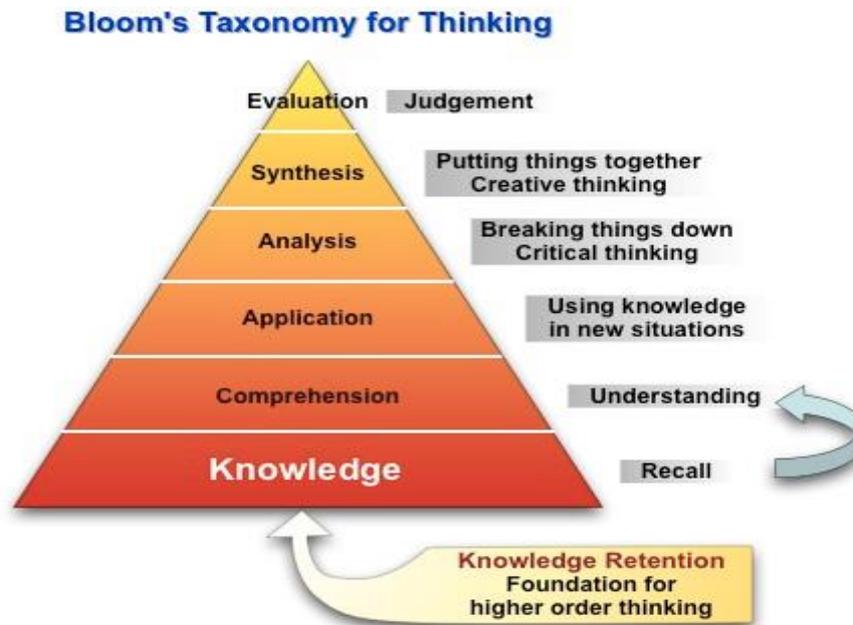
4.2 Tensions between professional experience and the teaching of students on the AS

Māhita demonstrated the ability to be misled by their intuitions of teaching when teaching a student with ASD (Helps et al 1999, Jordan & Powell 1995). From experience Māhita felt that “over time, if the same activity is done repeatedly, students tend to develop a deeper understanding of what they are doing and so become more skilled.” However, Marama did not follow this trajectory, as evidenced by a lack of understanding about what to do during news sharing even after six months of being present and hearing the same instructions three to five times a week.

Kolbert (2010) explains that in Bloom’s (1956) taxonomy of learning/thinking the hierarchy of thinking is based on the ability to recall the learning, so it would be appropriate to repeat activities until the students have perfect recall. Māhita subscribed to this view, expressing the idea that Marama should be able to do tasks that were presented daily. Bloom (1956) suggested that students move up the levels of learning and thinking, by doing and can only master

learning when they can apply the learning to new situations, analyse and evaluate this and create new ideas from it. This is illustrated in the following diagram.

Figure 18 - Bloom's (1956) Taxonomy for Thinking



(Baker, 2011)

The remembering/recall part of Bloom's taxonomy is often interpreted as Māhita did, "repeating activities to reinforce the learning to the point of easy recall." For example, when learning the times table, students rote learn until they can recall the tables easily. They may then move on to activities to develop understanding and apply this knowledge in new situations. Māhita did a wide variety of counting activities to develop the recall of numeral order, which was effective for most students.

For students with good recall abilities, this idea of repeating activities to develop recall is not problematic, but for those with communication and/or processing difficulties it can be hard to ascertain their recall, or to ensure the student has recall consistently. Marama could understand

that numerals represented numbers/quantity and could apply this knowledge through the addition of two numerals but could not recall the numerals 1-10 in order consistently.

However, because of the importance of categorisation of things to many students on the AS (Bock, 1999), counting activities for these students need to be structured to ensure focus is firmly on numerals getting bigger one by one. For example counting different coloured trucks would lead Marama to focus on the truck colours and not the quantity of trucks. Other children would not be distracted by 'what' they were being asked to count, or even by starting at a different numeral/number.

Students on the AS can either have excellent recall with very little input or very little recall with a large amount of input, or a combination of these depending upon the topic or concept being recalled. Students on the AS can use their recall to fill in the gaps in conversations by, for example, quoting movie excerpts that the student thinks could be appropriate at that point in the conversation. Ira could see a map once and could recall the shape of the country accurately along with where main towns/ cities are. Marama took over a year to be able to recall the order of numbers from zero to ten. Hari would use phrases from movies to replace conversation gaps, showing excellent recall but little comprehension.

When teachers rely on their professional experience to teach students who are different from those that they have taught before, contextual factors can come into play. The following table summarizes the contextual factors exerting tension on teachers relying on professional experience when planning and teaching students on the AS. The type of factor and the tension presented is analysed to demonstrate the effect if that tension is prioritised over other tensions. My early thinking was that teachers would be more effective if they had more skills and

knowledge. it For example, the tensions presented in this table would not be prioritised if teachers understood that students on the AS make progress in a non-linear fashion, require clear small step instructions and have sensory sensitivities and communication difficulties that impact upon academic achievement and behaviour (De Clerq, 2011).

Table 11 - Tensions between professional experience and teaching of students on the AS as identified by the AAT framework

TENSION	TYPE	RESULT IF TENSION PRIORITISED
National curriculum (NC) suggestions for learning order	RULES	Student on the AS seems to be ‘stuck’ at lower level, even though student may be able to do tasks that are more difficult. This belief is because student cannot demonstrate linear progression, so if student cannot grasp a level 2 skill they will not be offered opportunities to do level 3 skills until level 2 is completed with mastery of learning
Previous experience of teaching students, nearly all of whom learn and make progress in a linear manner (as suggested in the NC)	TOOLS	
Previous experience of short support interventions enabling students to make visible progress. Student can then progress further with no extra support.	DIVISION OF EFFORT /LABOUR	If student on the AS does not make visible progress during a short support intervention, student is seen as unable to make progress (presumption of cognitive impairment). If student does make progress during intervention but stops making progress after intervention, teacher may think either – student requires more support to make more progress, or that student did not really consolidate learning.
Student success is defined by academic achievement and desirable behaviour	COMMUNITY	Student on the AS can be defined as a failure or as unlikely to succeed in school (in current setting).

During the year it became clearer that all teachers involved in this research had solid teaching skills and knowledge for most of their students, as demonstrated by the personal, social and curriculum progress of the class, but these skills and knowledge fluctuated in regards to their students on the AS. Even when teachers said they understood how the AS affected students learning and interactions, they did not necessarily demonstrate this understanding in their teaching of those students. I could not find a direct link between teachers demonstrating knowledge of the AS with how contextual factors were prioritised or ignored by teachers when

they were trying to teach students on the AS effectively. However, there appeared to be a link between understanding the AS and student focused teaching choices. This is discussed in further detail in chapter six.

4.3 The Usefulness of 'imparted wisdom' in increasing teacher effectiveness

My initial thought, prior to this research, was that increasing a teacher's personal knowledge of the AS and relevant teaching strategies, through 'imparted wisdom', whether my own or others, that I was just passing along, would have a direct and positive effect on the success of a teacher when working with the students on the AS. The teachers all suggested that I was an autism expert and that they believed that I knew how to effectively work with children on the AS, so that they could and would make progress while at school.

There are a number of dichotomies in this section created by my (lack of) self-awareness during this research and write up. Firstly from a disabilities rights construction the experts on the AS and strategies to live well, must themselves be on the AS (Ne'eman, 2012), which I am, but I did not know that when in the classroom working with these teachers. Secondly, from a constructionist viewpoint, knowledge cannot be given from one person to another, as all knowledge is constructed between people within a context (Burr, 2003) and therefore I could not impart wisdom. However, the teachers constructed me as an expert, even when I was attempting to construct myself as a colleague, learning alongside them.

Māhita: "You just need to tell me what to do."

Ahorangi: "Can you help me rewrite this behaviour plan so that it will actually work?"

Kaiako: “That information you gave Tui’s teacher about autism last year is really good, I just read it and it helps me make sense of everything.”

Kaiwhakaako: “I like it that you tell it how it is. Just because a child has ASD doesn’t mean they aren’t naughty sometimes. It’s great to learn what is probably them being naughty and what is an expression of the ASD.”

This is another aspect of this research that I struggle to revisit and re-process and still find previous findings acceptable to me following my evolving self-awareness. I am unable to resolve the dilemma of a person as an expert, viewing myself as collaborative and the idea of co-constructing new ways of knowing and understanding. This may be because of my prior experiences as an ORs teacher and special education advisor (SEA). Both of these roles have an element of working with the teacher on the basis that the teacher requires external support for that student. Now, I work as a resource teacher of learning and behaviour (RTLb) and a requirement for being able to access RTLb support is that the class teacher is not able to manage the child and has already accessed in-school support. Again, even though we work using a collaborative framework this suggests an inherent expert model, where the RTLb is the expert and can help the teacher to find solutions.

However, what I did discover was that just passing along what I did and why, did not in itself have any impact, unless the teacher actually put the strategies into action, which was not often. There could be lots of reasons why the strategies are not put into action, completely unrelated to the person giving the advice and support, such as lack of time or energy or money to fund resources. This issue of implementation of ‘expert strategies’ seemed to me to be tied into the difficulty Canterbury Primary was having getting teachers to be accountable for IEPs. IEPs were previously controlled and typed up by the SENCO, a ‘perceived expert’ and interventions by RTLbs and SE were similarly imposed upon teachers.

In talking with these teachers, I found that if I genuinely worked *with* them over a period of time, meaning that I listened to what they wanted as outcomes for the particular students and drafted plans *with* them to try and achieve this aim, the teachers would in turn listen to me and try to implement the strategies I was teaching them. This is a collaborative model, rather than a ‘superior expert leading inferior teacher’ model. During this research, collaboration seemed to ensure that the teachers felt valued as people and as professionals, and provided a level platform for open and honest conversations (Goodall, 2011a).

Teachers were clear that the amount of support received in terms of the division of effort, affected their ability to develop their personal skills and knowledge and their effectiveness as teacher. An example is when Māhita asked me to explain how to teach Marama effectively, the teachers were particularly open to what they termed professional advice.

“When Tui had the psych evaluation from special education, it was useless, they sent a trainee with no support. I didn’t even get a full report before the trainee left. Telling me to just follow the school behaviour plan, when it was clear from the observations that this wasn’t working was just stupid,” was Kaiako’s thoughts on one of the specialist’s ‘professional’ input. “I had hoped the ed psych would provide a useful behaviour intervention, not just waste my time.”

Kaiako continued, “look at how good the speech language therapist is and how much progress has been made with the programme. Tui’s speech is much more comprehensible now, the rest of the class can understand Tui and so Tui’s frustration levels are going down. I can see that if Tui feels understood there will be a decrease in outbursts. She is a really good therapist with years of experience.”

Kaiako was a very experienced teacher and seemed to filter past titles to look at what experience, skills and knowledge a ‘professional’ or ‘specialist’ was bringing to the situation. If the information or advice provided was effective and helped to ameliorate or improve the situation then Kaiako was appreciative and took that onboard to add to their ‘professional toolkit.’

Kaiako: “I know that I don’t know everything and when I’m introduced to something that works with one of the class, I take it on board, as I’m sure there’ll be another time in the future when I’ll need that strategy again. But I know when I know more than someone telling me everything I am doing is wrong.”

Ahorangi had little outside input, other than from me. On one occasion Iorangi’s behaviour had deteriorated to the point where it was affecting the safety of others and myself, so it was brought up at one of the regular pastoral care meetings. A member of the management team was assigned to devise a behaviour plan for Iorangi as this person had just completed a short behaviour training course run by the Ministry of Education. The plan did not have the desired impact and Ahorangi chose to stop implementing it.

Ahorangi: “Emma, could you have a look at this behaviour plan with me? I was given it and told to use it just after you came in last time, about two weeks ago. It doesn’t work and I can’t use it. I know you have worked with Iorangi last year too, and I know you have done other behaviour plans this year, so you must know some strategies that I can use.”

Emma: “Let’s have a look and see.”

Whilst reviewing the plan it was clear that Ahorangi had not been involved in the writing of it as none of the strategies I had observed being used in class were included and some of the goals appeared to be unrealistic for Iorangi at that point in time.

Emma: “What were the goals you wanted? Are these really the goals?”

Ahorangi: “No, I just want Iorangi to stop leaving the classroom all the time, but I don’t think that being seated all the time is at all realistic. I was just given the plan.”

Emma: “Ok, well, how often is Iorangi leaving and what for, I mean how long and where to? What is going on at home? What else is happening at school?”

Ahorangi: “All those behaviours that I thought we’d got rid of, hitting others and then stealing stuff from other’s bags, that’s why I want Iorangi in class to stay away from temptation, but the hitting has to stop. I haven’t heard anything negative from home, except to let me know that Iorangi has started stressing out big time about leaving school at the end of the year and changing schools. Really stressed.”

Emma: “Oh, ok, that explains a lot. It’s really hard for kids on the spectrum to cope when they get really stressed.”

Ahorangi: “Yes, but worrying about something that is six months away, really? Getting that worked up?”

Emma: “Yes, things can get fixed into their thought patterns and so they go over and over and the worry gets bigger and bigger until it is almost impossible to cope with. So eradicating hitting and staying in the class during class time are the goals that you want?”

Ahorangi: “Yes, but get rid of sitting still all the time. Now how do we get there? What am I supposed to do?”

Emma: “Well, the strategies that you have used before with Iorangi worked really well, let’s just implement those again, right back from the beginning of term. Lots of verbal prompting, rewarding with time to make models, etcetera. Let’s write it up.”

Ahorangi actively sought out my advice around this behaviour plan and in looking at my side of the conversation I am surprised by my first questions which could be interpreted as quite dismissive of the existing plan. I think this reflected my view of the plan as unworkable and was meant to be inquiring rather than dismissive. I wanted to ensure that a plan was developed that Ahorangi would feel comfortable using and that would meet Iorangi’s needs too. Going back over the conversation I can see that we should have involved Iorangi in the planning to ascertain Iroangi’s self-identified goals and support strategies. Since this research I have become much more aware of the need to actively engage students in their own behaviour plans.

It was clear to me that how others involved interacted with, or gave feedback to teachers, was perceived by the teachers in this study as helpful/useful or unhelpful/useless. The teachers felt that helpful feedback, no matter from whom, enabled them to develop their skills and knowledge and become more effective teachers. They were also explicit in this during conversations at the conclusion of this research.

For myself, as Bogdan & Biklen (1992) suggested, the way in which I participated within each classroom and with each teacher changed and developed as the research and I evolved. In an excerpt of conversation from Kaiako before it can be seen that Kaiako perceived the trainee psychologist as unhelpful and the speech language therapist helpful. Further conversations with Kaiako and Ahorangi enabled me to understand that for these teachers the helpfulness of input was not solely about the content of that input, but also involved the context of the input.

Kaiako: “The RTLBs and special ed. psychologists are supposed to be the experts, right? They only come in when we don’t know how to go forward anymore, once we have tried everything in our skill set. But they just turn up, do a half hour observation and then you never hear from them again or even worse they send you a report that says everything you do is wrong. How can everything I do be wrong?”

Ahorangi: “When people come in and tell me what to do, it annoys me that they don’t know the class, they don’t know the individuals, how can they possibly know what will work?”

In response to Ahorangi’s question I returned to the subject of the behaviour plan to ask why I had been asked to tweak it.

Ahorangi: “You know me, you know Iorangi, you come in and talk to me, to us, you’ve worked with Iorangi and you always tell me if things could get worse first! Honestly, the plan was useless; it made things so much worse. I find it helpful too, that you remind me of the things that have gone right, where I have managed things before and they have got better, it’s not just an in and out and here you go thing.”

I noticed over the year that I became more mindful about ensuring that within each conversation I had with each teacher that I mentioned at least one thing that I had observed during the session that had been a positive strategy for their student(s) on the AS or a general positive comment about behaviour management or the student's learning. I believe that this has made my work more useful to the teachers I interact with based on the feedback received within this research, an example of which is below:

Emma: "What did you find most useful about having me in the classroom and talking with me over the year?"

Kaiwhakaako: "You listened and you kept reminding me of all the things that I do well, or things that worked really well that I hadn't even really noticed I did. Positive feedback, really, really good, I haven't had any of that since I left teacher's college!"

It was interesting that the teachers not only valued my positive feedback but were able to then use skills that I had stated were effective in more situations. I wondered why the teachers' existing skills and knowledge were not always being used to effectively teach their students on the AS.

4.4 Possible reasons teacher skills and knowledge can be present but not used effectively in the teaching of students on the AS.

In examining possible reasons why teachers may not use their existing skills or knowledge to effectively teach their students on the AS, I needed to identify the constraining contextual elements. The table below illustrates the factors that were revealed as key during investigation

of the idea that personal development of the teacher's skills and knowledge would increase understanding of and ability to support students on the AS.

Table 12 – Testing the idea – without these tools, IEPs are not implemented and teaching is less effective

Subject	Object	Hoped for Outcome
Teacher	Increased knowledge of the AS and skills in teaching methods to meet needs of students on the AS	Effective teaching of student on the AS

Contextual AAT Categories	Contextual factor details
Tools/Instruments	Available resources about the AS and teaching strategies (library, internet, conversations with others), IEPs, personal existing knowledge and skills, <i>energy, time, professional attitudes, ethics and willingness</i>
Rules	National curriculum School planning assessment and IEP policies
Community	Classroom culture, family/whanau support and involvement, community support groups such as AutismNZ
Division of effort/labour	Teacher, Teacher aide, Ors teacher, SE staff, SENCO, school management, professional development providers

Items in italics represent the contextual factors that, from data gathered, seemed to have to most influence, whether constraining or affording the effective teaching of the students on the AS. During this initial data analysis with the AAT framework, it became apparent that, although teacher skills and knowledge were a factor in the effectiveness of the teaching of students on the AS, there did not seem to be a relationship between knowledge and higher skills. This indicated that I needed to look deeper into the details of the data to look at the relationship between knowledge and effective teaching and what factors seemed to influence the skilled use of strategies to meet the needs of students on the AS. This detailed examination of the observations and conversational details put forward other factors, rather than knowledge, that could explain why some teachers used more skilled strategies and thus were more effective in their teaching of students on the AS than other teachers.

The most notable affordances on teachers use of skilled strategies to reach the goal of effective teaching of their students on the AS were firstly an in depth understanding of the students and then; the contexts of teacher energy and time available and teacher willingness to teach in a manner that met the needs of the student(s). As mentioned earlier in this chapter, time constraints can significantly affect the ability of teachers to gain an understanding of their students on the AS through observations and one on one interactions. Additionally, it can take a significant amount of time to plan and implement skills strategies to meet their needs. Hawkins and Klas (1997) study of perceived stress among mainstream classroom teachers found that time management was the highest ranking stressor for teachers was a self-identified lack of time.

Studies (Alexander, 2000; Kennedy, 2005; Wang, 2010) have reported that time plays a significant role in teachers' decisions about teaching methods and their pedagogical decisions. Any kind of student-centred teaching is more time-consuming and unpredictable than whole-class lecturing. Teachers working under a regulated national curriculum and class timetable who organize the class in a more teacher-centred manner are more likely to ensure completion of required tasks than teachers who spend a significant amount of time working 1:1 with individual students. Grant (2011) reported that the constraint of time is more strongly experienced by teachers working with students who struggle to achieve academically. Bacon (1994) put forward the idea that, with time pressure, teachers will inevitably feel not only stressed but frustrated. Frustration was observed amongst these teachers with regards to the lack of time to support their students on the AS. Some felt that the answer was to use teacher aides to provide more 1:1 support for these students.

Ahorangi: “It’s not fair that Iorangi gets no support, and that I get no support for Iorangi. If we had a few hours teacher aide time a week, we could get so much more achieved by ensuring Iorangi got the one on one time needed to understand what the task is and the prompting to stay on task until finished.”

Māhita felt that the system in the UK eliminated much of the time pressure, “we had a full time or half time teacher aide in each class in the UK. I could use the teacher aide to make sure students like Marama (*and others*) were supported properly. I don’t have the time to teach each child individually, it just isn’t possible.”

Kaiwhakaako felt that it was not so much a lack of teacher aides that created time constraints but school management expectations. This discrepancy could be explained by the fact that the two students on the AS in Kaiwhakaako’s class each had 7-10 hours teacher aide time each plus 2.5 hours one to one specialist teacher time, whereas Māhita and Ahorangi’s students on the AS had no teacher aide or extra teacher time as they were not in receipt of special needs education funding.

For Kaiako the biggest time constraint was the time available to actively teach or engage Tui. As Tui exhibited verbal and physical aggression for large chunks of the day, it meant that Tui was emotionally not available to participate in learning the curriculum. Kaiako, from long experience working with students with severe behavioural difficulties identified that the behaviours and the reasons for these needed to be tackled before effective teaching and learning could take place.

Theoretically placing the time constraints to one side, there is still the issue of whether or not the teacher will give the student on the AS the time and 1:1 interactions that they need in order to make the most of their school day. All teachers did make efforts to meet the communication

and learning needs of their students on the AS, some more than others. The AAT framework was used to examine why this might be.

The division of effort was not equal for the four teachers involved in this research, although all had access to myself, the special needs coordinator, senior management, and through those people the RTLB or special education staff. However, the RTLB is a scarce resource as they are responsible for a number of schools and can only take on new students (to assess, evaluate and/or support) when they have signed a current student off their roll.

To say that teachers need more help is not to imply that they are somewhat incapable, inadequate or cannot cope. Giving and asking for help works best when it is somewhat reciprocal, when teaching is seen as inherently difficult – as something that everyone needs help with; not just those who are weak or new to the job (Hargreaves & Fullan, 1998, p11).

The table on the next page presents the different contexts and viewpoints around meeting the needs of students, within the AAT framework the division of labour. These teachers wanted more help because they wanted to continually improve their teaching, not because they were new to the job or as Hargreaves and Fullan (1998) describe it; ‘weak’. Table 13 presents the teachers’ perceptions of issues around teacher aides and the division of effort/labour.

Table 13 - The importance of the division of effort/labour

Teacher	Division of Effort - support received	Division of Effort – perceived issues
Ahorangi	Ira attended a withdrawal group weekly, working on art type activities One term of weekly social skills group for both Ira and Iorangi	Would have liked a teacher aide to support literacy Would have liked a reader/writer or dictaphone for Ira Would have liked a collaborative approach or specialist input for behaviour plans (from school management)
Kaiako	Teacher aide in class and in playground (hours varied from 10-3 per week over the year) Speech language support worker (under guidance from speech language therapist) weekly	Would have liked support from school management to implement preferred (and self-designed) behaviour plan Would have liked qualified and experienced educational psychologist input
Kaiwhakaako	Teacher aide 1-2 hours a day each for both Hari and Paikea Specialist teacher 2.5 hours week each for both Hari and Paikea One term of weekly social skills group for both Hari and Paikea	Would have liked more flexibility in planning for class (by school management) Would have liked more support and collaboration over behavioural issues from school management
Māhita	Floating teacher aide 1 hour a day Marama attended a weekly withdrawal group working on phonics	Would have liked more input and support from family and more support from school management to achieve this Would have liked a teacher aide floating in classroom all day Would have liked more 1:1 support for Marama

As can be seen above, all the teachers would have liked more support from school management. As far as I am aware only Kaiwhakaako expressed this to school management, and this was the year before this research. What was interesting from my perspective was the desire for support and input to be more ‘collaborative’. Hargreaves and Fullan (1998) identified that a culture of collaboration strengthens teachers’ sense of common purpose and acts as a support for effective teaching.

Kaiwhakaako: “I’m not stupid, I’m a trained and experienced professional. I just want to go through things with someone, get some fresh ideas, not be told I’m doing it all wrong.”

Ahorangi: “I want realistic expectation from management, not just of myself, but of the children too. I know what they can and can’t do, and often why, but I want some help with how to get the kids from can’t to can, but help that accepts the reality of the classroom.”

Kaiako: “This one size fits all mentality of the management at the moment is not helpful. The school behaviour plan clearly doesn’t work for all the kids, or we wouldn’t have these problems that we do have. I know what to do, but I’m not allowed to do it.”

Māhita: “It’s no good telling me the family need to be on board, I’ve given them all the information and they just won’t accept it. Putting the stuff on ETap isn’t going to help. I know that *the principal* has got other families to work with the school before really successfully. I want *this* family to work with *me*.”

At times these teachers can and did make enormous efforts to effectively meet the needs of their students on the AS. The next chapter will explore why some of the teachers appeared to be more willing to make the efforts needed to be effective for those students, as this willingness seemed to maximise teacher use of skilled strategies and therefore teaching effectiveness.

5. Chapter Five - The key influences of willingness and attitude

Prior to this research I thought that effective teaching might be influenced by how willing teachers were to teach their students on the AS. In order to test this idea I carried out an analysis of the possible effects of ‘willingness to teach’ through the AAT framework, using data collected during observations and conversations. My aim was to ascertain reasons why some teachers were willing, so that this could be encouraged for the other teachers.

‘There are two ways of tackling problems.

One is to explore the bad and feature it.

The other is to discover good and encourage it’

(Sir Apirana Ngata, 1874–1950).

In order to analyse the affordances and/or constraints that willingness had on teachers, I first looked at what these teachers felt that it means to teach and compared this with what society expects of our teachers, in general and in terms of inclusion. This was then placed into the AAT framework with observed behaviours that indicated (un)willingness to teach the students on the AS in particular. For example, a teacher who explained tasks to the class without specifically attempting to communicate with the student on the AS, either before, during or after the explanation was not demonstrating a willingness to ensure the student was able to understand the task.

5.1 Teaching and attitudes towards disability/difference

Teachers teach people, whether those people are adults, young people or children. People are not a heterogeneous group, and we know that teacher attitudes towards difference are important (Parasuram, 2006). Researchers have indicated that for pre-service teachers and practising teachers, attitudes towards disability and inclusion are important factors (Cagran & Schmidt, 2010; Cook, 2004; Tait & Purdie, 2000), but little research has been done on teacher attitudes towards inclusion and students on the AS (Beatson & Prelock, 2002).

The ASD Guidelines state that ASD should not “automatically be seen as a problem, but is valued for its contribution to a resource pool of people thinking outside the square.” (Ministries of Health and Education, 2008, p10) The implication of this is that teachers should be viewing students on the AS through a lens of ‘potentially valuable members of society’ and not as ‘creating difficulties for the group’.

This approach supports the view that autism is not in itself dis-abling, but is a difference in thinking, being and doing (De Clerq, 2011, Peeters 2011). Some of the teachers shared this view, whereas other teachers used a classic medical model (Office for Disability Issues, 2005) of the AS as impairment, though none in this study held a tragedy model of the AS. The activity theory framework was useful in analysing what impact teacher expectation, as related to teacher view of the AS as ‘dis-abling’ or ‘difference’, had on effective teaching. Teachers in this study mainly viewed the AS as a difference, though there were clear thoughts about the students perceived and/or actual ‘impairments’.

The four teachers who took part in this research had differing views on what it meant to them to be a teacher, to teach and varying attitudes towards students with learning and/or behavioural difficulties, including those with ASDs. These attitudes and willingness to teach students with differences need to be put into the cultural and historical context of society and education, rather than being seen as isolated viewpoints on a theoretical position. These attitudes affect real people and the way that real people view and treat one another.

Positive teacher attitudes are important factors in the success of students with disabilities in regular education classrooms. Simpson, Boer-Ott & Smith Myles (2003) reported that, “with support and education, 86% of teachers were willing to accept a student with a disability, but less than 33% were prepared to do so without support and education.” (Ministries of Health and Education, 2008, p193) For me this highlighted two of my preliminary research questions, ‘why are some teachers unwilling to accept students with ASD (as learners) and what happens to a student who has a teacher that it unwilling to accept them?’

“Marama just can’t do what the others do,” said Māhita. Māhita positioned Marama as other, as not only less able but having less potential than the other students, “I’m not sure that this is the best place, I mean there really isn’t any progress.” Kaiako talked about Tui “not yet knowing how to behave appropriately, and with such poor impulse control I’m sure it will take a while.” Though Kaiako clearly identified ‘deficits’ in behaviour and impulse control through these statements, there was also clearly a sense of potential indicated that Tui can and will learn.

As a teacher in a special school in the late 1990s I was privileged to teach a young man with advanced Duchene’s Muscular Dystrophy. Min had the use of one finger and his speech, but otherwise was wheelchair and carer dependant. He had the most amazing sense of humour

despite knowing that he would follow his brother to a young death, in the not too distant future. Min insisted I learn an Arabic greeting to honour his cultural background and religious beliefs and he taught me that he was not disabled, but that society disabled him. A class visit to the local Mosque proved his point – he was willing to go inside, could already tell me what I would see there, but no-one had put a ramp there on the day we visited, so he could not. Min was being disadvantaged and dis-abled by society.

A few years later I had a blood clot which hospitalised me for a few weeks. Upon release I used a wheelchair for a short time and then had to use crutches for a month. I was stunned by the seeming inability of people to ‘see’ anything but the chair or the crutches, as well as an unwillingness of people to enable my access to shops or restaurants. Before this I had heard what Min said about people not seeing him, only seeing his chair and presuming he was stupid or not worth talking to, but because I had not experienced it, I could always put it down to other factors – his age, possible sensitivity to exclusion or his ethnic background or racism.

Then I met and talked with other people who used canes or hearing aides, walkers or wheelchairs. I took my elderly mother-in-law out in her wheelchair once a week, with her oxygen supply and understood more and more that equality of worth of people is not always a given (Nussbaum, 2006). Many studies in the field of special education remain compensatory towards individuals, rather than based on genuine and equal worth (Nussbaum, 2006). This could explain the idea that a student with on the AS is ‘less’ than, whether that is less worthy of being taught, less valuable a member of the class. Both these ideas were expressed by one of the teachers during this research.

I personally enjoy working with students on the AS, some teachers do and some don't. What I was interested in was why some teachers were willing to, and others less willing to, engage with and work with children on the AS and if this had any impact on the outcomes for children. How the teachers viewed teaching was important because if they viewed their jobs as imparting information and nothing else, then anything outside that could be seen as over and above the call of duty. All of the teachers saw their job as wider than that, though Māhita was most focused on the outcome of academic progress, in contrast to Kaiwhakaako who viewed "growth of each child and growth as a group that cares for and nurtures each other" as the core focus of teaching.

Using the AAT framework with both internal (attitudes, views, ethics, personality) and external contexts I aimed to uncover which internal factors afforded or constrained the willingness of the teachers to teach their students on the AS. Conversational data collected early in the study indicated all these teachers were positive about their careers and the school that they were teaching in. In placing the data on the AAT framework I wanted to ascertain what was different about that positivity and willingness when the teaching was of students on the AS.

The teachers in this research all seemed to see their jobs as more than just standing in the classroom imparting wisdom, especially in relation to their students on the AS. They all felt that students needed first to be ready for learning, and that this was a part of their job.

Ahorangi: "If things have gone wrong at home in the morning and the child doesn't work through it and move on, then any teaching I do is going to be missed as that child is going over and over events from the morning in their head."

Kaiwhakaako: "Students need to be happy to learn well, when Paikea is anxious, I need to deal with that before moving on to anything else."

Kaiako: “I need to help Tui learn to use appropriate behaviour in school, that’s really important.”

Māhita had the closest view to the idea that teaching was about imparting information, but even this was expanded with the view that “the children also need to learn to follow rules and routines, to learn to get along with each other.” Māhita felt that teaching these things was also within the remit of being a teacher.

Kaiako, Ahorangi and Kaiwhakaako all thought that teaching was much more than imparting information, and was to some extent or another about leading children into being full members of their communities. These teachers were progressively more involved in the community with Kaiwhakaako living locally and knowing all the children and their families very well.

Kaiwhakaako: “We all need to learn to manage our ‘selves’ and how to be around others. Some kids learn this at home or before school, but many don’t. Part of my job is to ensure this happens, and without it, it is much harder for kids to learn the formal academic stuff.”

Ahorangi: “Teaching empathy is so important, I aim to make the classroom the safe space, where individuals can talk about what is happening for them and get support from their peers and myself.”

Kaiako: “If I can teach the class to ignore Tui’s low level aggression, then they have learnt a valuable life lesson and I can focus on helping Tui to develop skills to prevent the higher level, more serious aggression and violence.”

Even though the teachers all appeared willing to teach their students on the AS during the first term of data collection, I wanted to further examine what factors influence teacher willingness

as this did vary over the year. Existing research has stated that attitude towards disability was a factor for teacher effectiveness (Jordan, Schwartz, E., & McGhie-Richmond, 2009).

From a social constructionist perspective, teacher attitude towards disabilities in general and ASD specifically are socially constructed, within personal, cultural and wider societal contexts. “Teachers are more than mere bundles of knowledge, skill and technique...Teachers are people, too. You cannot understand the teacher or teaching without understanding the person the teacher is.” (Fullan and Hargreaves, 1991, p25). Using the activity theory’s ability to analyse data from complex contexts, I looked at how disability and ASDs are seen nationally and in general society, so that I could place the teachers’ attitudes toward disability/ASDs and inclusion within that context.

One aspect of willingness to teach that became apparent during this research was related to the social emotional development of the students on the AS. The emotional experience and growth of students on the AS was seen as very important by Kaiwhakaako but not Māhita, with Kaiako and Ahorangi feeling that it was a part of the overall goal for their students. Prior to this research I had not reflected on the emotional experience of students on AS at school. I was not assuming these students did not have emotions, just that I did not consider that this was a very important issue for them. Interactions with the students in this research backed up the information provided by adults on the AS (emails from members of Jen Birch’s Asperger’s web ring, 2008); emotional experiences and the skills to make and sustain positive interactions and friendships are hugely important.

On reflection, I realised that I was not using the deficit model of ASDs; however I was viewing this topic through my own filter. I rarely reflect on my own emotional experiences, and was

applying my ‘I am not seeing it and therefore it doesn’t exist, or if it does exist it doesn’t matter’ mentality to the issue. Having made this connection, I discussed interpersonal interactions and friendships with a couple of young men with high functioning autism/Aspergers. Both felt that being able to make and have friends and not be picked on at school were the important factors for them, rather than it being the actual emotional experiences. They felt that the supportive attitude of teachers, who were willing to set up successful social situations for them, was why they had been able to make progress in this area (personal conversations 2010).

All the teachers in this research tried to set up social situations, encouraging social interactions because they wanted to support the emotional experience and growth of the students. However, structured teaching to support this was not consistently evident across the teachers. The older students were given (additional) structured support through their attendance at the social skills group and camp. Kaiako gave Tui clear instructions and guidance for social interactions when managing Tui’s challenging behaviours.

5.2 The role of willingness

Willingness as framed in this research seemed to be influenced by the social constructions of teachers towards ASDs, disabilities and inclusion. This was examined in the context of school and national legislation and phenomena. Pearson (2009) suggested that teacher knowledge also needs to be looked at in the context of teacher attitudes and beliefs. I initially started by analysing the teachers’ IIQ demonstrated changes in attitude over the period of this research. However, I became frustrated that there was not a good fit between this quantitative data and

the qualitative observational and conversational data. Therefore I decided to use the qualitative data to investigate possible reasons why the attitudinal changes took place, using the contextual focus of the AAT framework. As part of this, the role of the teachers' personal ethics, morals and beliefs in their changes in attitude was also examined. The AAT framework finding that a positive inter-personal relationship between the teacher and their student with ASD was an important factor was found to be especially relevant when external and internal expectations conflict. The observed effects of these positive relationships illustrated this finding. In light of this, the difficulties experienced by teachers in forming and sustaining relationships with students on the AS were reflected upon.

Willingness was far more complicated than I had first thought it would be as the following conversational extracts suggest. In these Māhita, who was very frustrated with Marama, could be interpreted as being willing to a greater or lesser degree, depending upon the level of observational context supplied. Contextual data revealed that Māhita was initially positive and willing, but that these both decreased in frequency and intensity over the year. Māhita became increasingly frustrated by being unable to understand or relate to Marama, and felt that their teaching strategies were not meeting Marama's needs. Māhita used the term autistic to describe Marama, and had expressed the idea that Marama would be better served in a special school a number of times.

Bilken et al. (2005) explored the language used to describe people with autism, such as autistic, classified or diagnosed with autism and found that different self-advocates preferred different terms. This right to self-name is one that the students in Canterbury Primary had not yet become involved with, though four of the students did give voice to their differences from their peers only two of the students used the words autistic or Aspergers with which to describe

themselves. During my conversations with the teachers I was interested in their choice of words and descriptions of the students and their behaviours, and if this had any influence on their willingness to teach.

Māhita often described Marama as “looking like a wet weekend.” Following on from a discussion about this I discovered that this was how Māhita saw Marama’s face when it was expressionless and Marama was seemingly unresponsive to external stimuli. However, the connotations for Māhita were related to Marama being “miserable and unengaged, or living on another planet” rather than withdrawn or seeking solitude within. I felt that this was an example of Māhita not understanding how a student on the AS’s interactions with the world are very different from their neurotypical peers.

When I observed Marama being withdrawn and expressionless I also observed Māhita attempting to engage through use of 1:1 verbal contact, eye contact, exaggerated facial expressions such as smiling broadly and occasional touching or the arm. In the majority of these observations Marama’s responses to Māhita were minimal if anything, perhaps a reorientation of body to be facing in the general direction of the teacher or a brief look at their writing book.

Māhita found this difficult, saying that “I want to have a good personal relationship with Marama but this blanking out is hard to work with, I don’t even know if Marama likes me or hates me.”

Perhaps if Marama had been able to use more substantial and clearly positive body language feedback it would have made it easier for Māhita to be comfortable with their inter-personal relationship. Even though I fed back the information Marama had given to me about liking

school, class and teacher. Māhita struggled with the lack of consistent and personal expression of this.

Māhita: “If I just knew Marama was settled in class and happy, then I could work out how things are going more easily. I can’t feel this even when you tell me.”

When I observed Marama arrive at school and smile at Māhita and see the smile back it was clear that Māhita was continually trying to communicate care of and interest in Marama. “It is so nice to get a smile hello, and I really feel like today Marama wants to be at school, in my class.” I was intrigued by the notion that Māhita may feel more valued by Marama on those days which were started with a smile and how this value affected Māhita. I had not previously thought about this aspect of student-teacher relationships at all, and sadly I did not ask further questions about this.

“I just don’t know how to meet Marama’s needs and when I get this blank look I have no idea where to next. It’s ok for you, Marama is happy to work with you one on one and engage with you, but I have all the other kids in my class too,” was one of a number of comments in this vein from Māhita.

This particular comment was following on from a session where I supported Marama with a writing activity, as it had been a number of weeks since any writing engagement had been evident. Marama had drawn the story and written one sentence with a number of verbal and physical (fingers on arm) prompts from myself.

Bilken explains that in his research with autistic people, initially he was not able to conceptualise what the person with autism was feeling or how they understood their experiences (Bilken et al., 2005). Māhita frequently expressed frustration with Marama and

often through our conversation it was clear that Māhita could not understand what Marama was experiencing, thinking or feeling. This frustration if taken out of context would have led me to think that Māhita was unwilling to try and meet Marama's needs, but apart from a period of time related to whole class assessment, discussed in chapter six, Māhita was constantly trying to engage with Marama in a positive manner.

Emma: "Why is it that you were so frustrated with Marama today during the number line session on the mat?"

Māhita: "Umm, well, it's the lack of focus, you know, not paying attention, I mean Marama could do this activity last week and then today I get that blank look and a mumbled dunno when I push for a response."

Emma: "I noticed that you consciously tried to get Marama's attention with a variety of verbal and visual prompts and that Marama did in fact turn around and look in the general direction of yourself and the number line."

Māhita: "Yes, I know but then there was still no response and I know that Marama can do this work, but it seems as if, as if everything has been forgotten."

Emma: "How do you know that Marama understands the number line?"

Māhita: "Well Marama can count on and back using it, mostly, so not today, but last week."

Emma: "When Marama was successful in using the number line with you, was it in a big group or a small group or..."

Māhita: "No, no it was 1:1 with the teacher aide, she had some time to work with Marama because her child was away and so she sat with Marama and did the worksheet."

Emma: “I wonder if the differences between the whole class activity on the mat and doing the number line 1:1 with the teacher aide made it difficult for Marama to use and apply the knowledge or if it was just too overwhelming? I’ve noticed that during whole class on the mat Marama participates less than in any other context. What do you think?”

Māhita: “I have no idea, I just don’t understand Marama at all. Either the knowledge is there or not, how can I know?”

During this conversation, I was thinking about how Marama always tried to sit off to the back left hand side of the mat/class and would orientate towards the back of the classroom and the box of blocks. I was running through whether or not there was more/less participation than when Māhita insisted Marama sit closer to the front on the right hand side of the mat/class.

Māhita was focused on whether or not the knowledge existed and I was focused on sifting environmental cues to evaluate sensory input differences. This was where I needed to clarify Māhita’s thoughts to check my interpretation. My working interpretation was; this idea that knowledge and by implication the ability to express it, exists ad infinitum once it has been acquired is hard to conceptualise alongside the idea that the ability to express oneself can be dependent upon environmental factors. Māhita was showing willingness to try and engage Marama, but a lack of understanding about environmental impact on students on the AS made it difficult for Māhita to choose strategies that best fit the situation.

Emma: “When I get nervous, like having to sing in public or something, I can’t remember the words. Maybe it is hard for Marama to give the answers in front of everyone?”

Māhita: “Maybe but I doubt it, I think it is just a lack of focus, like off in another world, you know when Marama has that blank look and is staring off into space. I don’t have

time to work one to one, I've got five other kids with needs in this class and then there are all the other kids who need my attention.”

Here Māhita is constructing a meaning of Marama of ‘staring off into space.’ Māhita is trying to interpret Marama’s behaviour but does not have the conceptual understanding of autism as a difference in the way people interact with, understand and experience the world. Belkin et al. (2005) stresses “the importance of interpreting the mind and body from an insider perspective” (pp65) as it can be the case that the person with autism has difficulty making their body comply with what their mind wants it to do, for example speak or move in a particular way. I was attempting her to give an insider perspective gained from friends on the autistic spectrum, but without naming that, it was not understood by Māhita to be anything other than a suggestion.

At other times Māhita would talk with me about the sense that Marama did not really understand any of the literacy curriculum and was probably unable to learn in this area. These comments are suggestive of a more negative attitude, presuming incompetence rather than competence. Additionally Māhita’s conversational data demonstrated lower levels of willingness as the year progressed.

It has been suggested that teachers who fail to presume competence may “forever doubt whether to try and educate at all, and would likely be quick to give up the effort,” (Belkin et al., 2005, p.73). Morton (2011) also suggests that when teachers do not see students as learners they stop seeing themselves as teacher for those learners. This was neatly encapsulated in the following conversations between Māhita and I about Marama’s writing.

In the first conversation Māhita views Marama as being a non-writer, in the second a few months later Māhita is talking about a lack of progress which I challenge with examples of

progress. In the third conversational extract, in term three, Māhita attributes Marama's ability to work to a requirement to have one to one support. In none of these extracts does Māhita express the idea that Marama has learning potential in the area of literacy.

Emma: "How do you feel today's writing session went for you and for Marama?"

Māhita: "Well, as usual Marama needed lots of support to do anything, not even getting a pencil without being told to."

Emma: "I saw that you were using verbal prompts skilfully to support Marama get started with today's writing. Marama had a pencil, the right book and started writing really quickly this morning."

Māhita: "Yes, but only the date got written independently and that was just copied off the board. Every day we do that, I mean everyone knows to do that first. But then as soon I as got to pay attention to someone else to support someone else in the class Marama stops engaging and just sits and does nothing. It is so frustrating, I mean I did the testing the other day and Marama knows all the letters but then nothing, no ability to write without me saying how to write."

Emma: "You had asked the class to write their news, after discussing it with a partner on the mat. Marama didn't give any news on the mat during feedback, is it possible that Marama didn't do any more writing because of not knowing what to write as opposed to not knowing how to write?"

Māhita: "No, no, Marama just won't write anything unless I spell every single word. I can't do that, I don't have time. And, and if Marama does know the letter names and sounds, could make an effort you know to try sounding words out."

Emma: "A number of children who are perfectionists don't like to write words incorrectly, so they want to know how to spell them before they will write them. Perhaps this is the case for Marama?"

Māhita: “I really don’t know.”

A few months later:

Emma: “What do you think about this piece of writing from Marama?” (today’s work)

Māhita: “Well, its not really good enough, I mean look at it in contrast to all the other kids work. Look, everyone else has written three to ten sentences and Marama has only written one.”

Emma: “This word here has been self-corrected, that is great that Marama self-corrected without prompting.”

Māhita: “I just don’t think there has been any real progress all year, I mean look at these other pieces of writing from the others, so much better.”

Emma: “I can see that their writing is the next level in the curriculum from Marama’s but can you remember earlier in the year when Marama didn’t write any sentences, just the date? This is a whole sentence, with self-corrections.”

Māhita: “Oh yes, yes.”

Emma: “This means that Marama is able to achieve this term’s literacy goal of writing a sentence unaided.”

Māhita: “I’d forgotten that, yes, yes. But its still not on track to be at the required level by the end of the year.”

In term three:

Emma: “Marama wrote this with me today, what do you think? I helped him to decide what he wanted to write about by talking first and spelt all the words out for him that he asked me to.”

Māhita: “It is certainly the longest piece of writing I’ve seen from Marama but really Marama always does more work with you than when it is just me. I don’t have time to do that.”

Emma: “Do you remember when I said I thought that maybe Marama needed to have the words right before writing them. I think that’s what it is, why Marama doesn’t want to commit to paper. That time when a word was self-corrected, I went back through my observations and noticed that all the words Marama used in the writing on that day were on the walls. That was why Marama was able to write without support, and how the word could be self-corrected.”

Māhita: “So Marama knew which words to look for and copy to make the sentence?”

Emma: “Yes, and not only that Marama seemed comfortable writing with the knowledge that the writing will be spelt correctly.”

Māhita: “I still don’t see how I could do this, you seem to understand and I wish you could spend more time working with Marama and helping, it seems to really help.”

Reflecting on this last conversation, I thought I could have handled it better and brought up all the things that Māhita did that supported Marama, particularly the way Māhita placed vocabulary around the walls and encouraged the children to find words every day. This was likely to have been a key part of Marama’s writing strategy and identifying this properly may

have helped Māhita to view herself as teacher. Perhaps also I could have further explored Attlefield's (2005) perception that when a child refuses to do or fails classwork tasks, that the teacher see them as not having the ability rather than having barriers to producing the work in an acceptable manner.

Biklen (2005) wondered if people, including teachers, cover up their pessimistic views about the academic abilities of their autistic students. Māhita was relatively open about not thinking Marama could achieve or even make much progress. This was highlighted whenever Māhita suggested that this was not a suitable school for Marama.

Māhita: "I mean mainstream might be right for some children with autism, but I think special school is better for those students who really struggle to make any progress, like Marama."

Emma: "I know that it is a struggle to meet Marama's needs but since starting school last year Marama has made lots of progress in a variety of areas."

Māhita: "Do you think so, I just don't see it. With the others they can write proper stories now, draw representative pictures, use some te Reo. But, with Marama, none of that is evident."

Emma: "That's true, but I think back to Marama's first term, when in a different class, when the teacher would call out Marama, there would be no response. Marama would bring me the last hat left in the cloak bay to ask me if it was theirs, and Marama was written in it in big writing. Now Marama consistently responds to their name being called and recognises it in writing and can write it unaided. Plus, most routines are now able to be followed, it's fantastic."

Māhita: "When you say all that, it's obvious progress has been made, but it is pre-school stuff, I still wonder if this is the best placement. I know Dad says Marama is just like he

was as a child, but I can't see how Marama can go from this to getting a degree and having a professional job.”

I do not think Māhita was unwilling to teach Marama per se at the end of the year, rather that Māhita was unable to envision making a difference for Marama and that it was this that influenced Māhita's teaching choices. It is also possible that Māhita's construction of progress was the framework through which Marama's work was being judged. Māhita and I had different constructions of progress, with Māhita's seeming to be related to curriculum levels and mine related to changes made in the process and output of tasks, no matter how small.

5.3 Teacher attitudes to teaching

The teachers in this study felt that teaching was more than just a job, they felt that it was an important aspect of the community. All of the teachers were involved with extra curricula activities for students and two were also taking part in tertiary studies to support their professional development. However, they expressed views that teaching had changed over the years and was going to continue changing. In this aspect the teachers were less positive. These conversational extracts are from conversations with the teachers during the first term, when I was asking the teachers about how they interpreted the role of being a teacher.

Kaiwhakaako: “It's my job to help all the kids in my class grow, but I think it is unreasonable to expect me to be this perfect person every day, just because I am a teacher. Teachers have bad days too, just like everyone else. As long as I am open with the kids and let them know I am feeling grumpy, it gives them an opportunity to learn how others handle being grumpy and how to react around a grumpy person. It drives me mad when I'm told I should smile all the time.”

Ahorangi: “When I started out teaching, it was very different to today. We seem to have to do so much more paperwork now, and there is less time to go with that teachable moment, the curriculum is much more prescriptive now.”

Kaiako: “I still love the job, but it is much harder work now. When you’ve got a class with so many different needs and a child with such big behavioural difficulties it is tiring.”

Māhita: “I want to have more time for the class to learn through doing and playing. I do get to do that, but not as much as I’d like, there’s so much to get through in a day.”

Emma: “I really enjoy working in a supportive role, because then I have more time for observations, to ensure my planning will meet the student’s needs.”

The teachers in this study were, on the whole, still very positive about being teachers. They certainly all observably enjoyed working with children and participating in school life. At some point in the school year each teacher was very tired and this demand on emotional and physical energy is a factor in teacher willingness. It is much harder to engage a student that is difficult to engage, especially when you are tired or feeling less than your best.

All the teacher expressed the opinion that some days, they just didn’t want to come to school as they were tired and just wanted a break. I know that when I have been a classroom teacher, I have certainly had days like that, as have most of my colleagues. Overall these teachers’ attitudes towards teaching seemed to have evolved from their personal beliefs in conjunction with school and community expectations. The table below introduces some of the tensions experienced by the teachers as a result of community expectations and that the observed effect of the tension was within the classroom context.

Table 14 – Activity theory explorations of tensions in community expectations of teachers

Tensions	Observed Effect
To ensure all students are well behaved	Some teachers prioritised teaching students' desired behaviours over implementing the school behaviour policy. Other teachers spent a lot of time explaining and discussing school and classroom rules.
To ensure all students make academic progress (as presented in the discussions about Marama)	All teachers worked on this, but from different angles, some stressed literacy and numeracy as stressed by national policies, other stressed skills embedded in the national curriculum as pre-requisites for academic progress.
To be kind, calm, friendly at all times	Teachers did not signal to school principal or senior staff when they felt overwhelmed or stressed by external or school based factors. Teachers presented a public face and a private face.

5.4 *National/Societal attitudes towards disability and inclusion*

Teachers, like most all people have socially constructed attitudes, influenced by the cultural filters and lenses of their upbringing and the places they live and work in as adults (Crotty, 1998). Thus, in order to understand the teachers and their attitudes better, I needed to place these within the framework of national/societal attitudes towards disability and inclusion in Aoteroa/New Zealand. Although New Zealand law requires that every new building and major reconstruction provides 'reasonable and adequate' access for people with disabilities, older buildings, even those that are public, are not required to provide even that 'reasonable and adequate' access.

In January 2011 a group of friends that included five wheelchair users, were told by an airline within Aotearoa/New Zealand that they could not fly together as the airline would only accommodate two passengers in wheelchairs on any one flight. This was despite the group containing enough people that they did not need any assistance from the airline (Jetstar). In

2010 the High Court found that the Health Ministry's practice and policy of not paying family carers of adult disabled children, who are eligible for paid care, was discrimination. The High Court decided that the Ministry had failed to show that its policy was justified, was at odds with the Aotearoa/New Zealand Disability Strategy and failed to acknowledge the Convention on the Rights of Persons with Disabilities (NZPA & Fairfax New Zealand Limited, 2010). The Health Ministry is appealing.

If you are disabled by an accident in Aotearoa/New Zealand, you are entitled to Accident Compensation Corporation (ACC) funding for the duration of your disability. This includes funding for wheelchairs, modifications to property, medications, carers etc. However, if you are born disabled, you are entitled to much less government support and funding. This has led to the apparently absurd situation where two people with identical disabilities receive completely different levels of support, with one able to live life as actively as possible and the other unable to afford a wheelchair. This in itself does not indicate society's attitude to disability, what it does, however, is indicate that society seems to be relatively at ease with discrimination at some level (Nussbaum, 2006).

Despite the Education Act (1989) stating that "people who have special educational needs (whether because of disability or otherwise) have the same rights to enrol and receive education in state schools as people who do not", it needs to be noted that IHC (a non-governmental organisation providing services for and lobbying for people with intellectual disabilities in Aotearoa/New Zealand) filed a complaint against the Ministry of Education in relation to full access to schools on the 31 July 2008. At present they are "still waiting for a

formal written response from Crown Law”, (Vanderkolk, 2011). Another lobby group, CCS Disability Action aims to affect change in communities so disabled people have access to the same opportunities as all other members of society. Taken together, all these things would seem to indicate that Aotearoa/New Zealand is not a fully inclusive society, and that it still has some changes to make to end discrimination against adults, young people and children with physical, sensory and/or intellectual differences.

Currently most public transport in Canterbury is not wheelchair accessible, nor are all schools (some classrooms at Canterbury Primary school are and others are not). This can be seen as a lack of willingness of society to enable people who use wheelchairs to access all of public life in the same manner that people without wheelchairs can. Or, it can be interpreted as an unwillingness to spend a large amount of money that may not be easily available, for a minority of people. Again, this would indicate a lack of equality for all individuals (Nussbaum, 2006).

The disability strategy envisaged a time when New Zealand/Aotearoa would be a fully inclusive society, which was described as being achieved when society highly values the lives of all people and constantly enhances the full participation of those people living with disabilities (Ministry of Health, 2001). As this full participation is not evident yet, the examples given in the chapter suggest that both our schools and wider communities are not fully inclusive.

5.4.1 *School attitudes to inclusion and diversity*

Inclusion for the purposes of this thesis was the presence and participation of the students on the AS in their local school which would lead to learning and personal development. Part of this is catering for the sensory sensitivities of students on the AS, which is as important as ensuring physical access for wheelchair users and the availability of signing or other augmented communication systems for those who are deaf (Booth & Ainscow, 2002). Classrooms in Canterbury Primary are colourful, with lots of wall displays and things hung suspended from the ceiling. As students on the AS tend to find environments filled with lots of different visual stimuli over-stimulating, the school policy is to provide a desk with high sides for students who found this environment too high-stimulus. One student was also allowed to wear earplugs as he found the bells distressing. However, both these strategies could also inadvertently contribute to social isolation for the student.

In contrast to these positive and inclusive strategies, the school behaviour policy was applied to all students, even those with no cognitive understanding of the policy, or those who viewed the time outs as rewards and not negative events. This demonstrated the importance of “applying the policy equally, to all students” (principal) without necessarily understanding that applying something equally is not always the same as equitably. “Equality means that everyone gets exactly the same treatment, without regard to individual differences...equity means that everyone gets the same quality of outcome – *shoes* that fit their individual needs,” (David, 2008).

For example, students who are over-stimulated throughout the day may well have more incidences of ‘unacceptable behaviour’ such as shouting out or running out of the room. If three students shout out, one because they are over stimulated and can’t recall the rule, one because they really want to tell the teacher the answer, and one because they are annoyed that someone else has a ruler that they want, should they all be responded to in the same way?

“Tui constantly needs reminding of the class rules, over and over, they just haven’t sunk in yet,” remarked Kaiako.

When observing Kaiako, it was clear that the skill used in classroom management distinguished between students being unable to comply and those who were unwilling to comply. Kaiako would thank over-excited students for their enthusiasm and remind them that they needed to put their hands up. Tui’s shouting was usually irrelevant and unconnected to the questions or discussion under way. In response Kaiako would either ignore the shouting, if minor and short, reminding Tui to use a quiet voice; or if of medium impact, remind Tui, “we don’t shout out in class Tui. Put your hand up when you want to say something.”

In this way all class members’ recall of the rules was constantly being reinforced, but the way in which it was done was suitable for each of the students involved. A blanket application of the school behaviour policy meant that teachers were not meant to apply that distinction of ‘unable to yet’ versus ‘unwilling to,’ to students in regards to incidences of aggression or violence. Further findings related to the behaviour policy are discussed in chapter six.

This school policy could also have been interpreted by teachers as meaning that individual differences in students were not to be catered for, which could affect a teacher’s willingness to

put extra time and effort into teaching individual students who are requiring more support. However, some teachers felt that individual differences were not accepted in a wider sense.

Kaiwhakaako: “I don’t think the school is really interested in meeting the needs of anyone who is different. They certainly don’t try and meet the needs of any staff members with specific needs, no matter how often they are told. I think there is a certain amount of lip service, but that’s it.”

Kaiwhakaako was discussing the way that information was circulated around the school using print media. It was known in the school that one of the staff members struggled to read black print on white paper, finding cream or buff paper was less difficult to use. However, after using buff paper once, the notices went back to being distributed on white paper. Kaiwhakaako interpreted this as indicating a lack of inclusiveness in the school.

5.4.2 Teacher attitudes towards disability and inclusion

When taken in the context of the need for classroom management of challenging behaviours, a negative attitude could indeed have an impact on the way a teacher views students on the AS. If someone held these negative views but had no role in working with a student on the AS, those views would not directly impact on a student. However, a teacher who feels that a student on the AS in their class will negatively affect other students can set in place powerful self-fulfilling prophecies (Jussim & Harber, 2005). This implies that teachers who became more positive over the year may in future have more supportive interactions with their students on the AS.

Data from the IIQ showed that at the end of the year the teachers' attitudes had shifted in a variety of ways, with the most striking aspect being a decrease in positive attitude of all of the teachers in at least one area each. This was not something I had expected. Changes of attitudes over the school year can be seen in Table 15. In this table the teacher attitude is separated out into how the teacher feels having a student on the AS in their class will impact on themselves, on the school environment, on the rest of the class and on the student on the AS.

Table 15 – Changes in teacher attitude towards having a student on the AS over the 2010 school year

Change over year	Impact on self	Impact on environment	Impact on rest of class	Impact on student with ASD
<i>Increase in positive attitude</i>	Kaiwhakaako	Ahorangi	Kaiwhakaako Ahorangi Kaiako Māhita	Kaiako
<i>No change positive attitude</i>				Kaiwhakaako Ahorangi
<i>Decrease in positive attitude</i>	Ahorangi Kaiako	Kaiwhakaako		Māhita
<i>Decrease in negative attitude</i>	Māhita	Māhita		
<i>Increase in negative attitude</i>		Kaiako		

All the teachers were more positive at the end of the year than at the beginning in relation to the effect of having students on the AS in a class on the other students. Kaiwhakaako could see that the tolerance and acceptance of the class had built up over the year as the students “got used to Hari and Paikea’s differences, they learnt that people can still be kind and caring and friends, even if they don’t talk the same or walk the same.” Ahorangi had found the impact of having two students on the AS in the class quite difficult on self. Despite increasing positive attitude with regards to the impact on themselves, Kaiwhakaako agreed with Ahorangi.

Kaiwhakaako: “It was really hard work, though it was worth it, and I do want another student on the AS in my class next year. Paikea’s mum was really draining, needing a lot of information, over and over. I shouldn’t have to deal with all of that. In the end, I would try to avoid meeting her, or send her to the SENCO.”

This remark, if taken out of context, could reflect badly on Kaiwhakaako, however, in context it was a factual statement, reflecting the time and energy required not for Paikea in terms of teaching and learning, but for Paikea’s mother. Paikea’s mother wanted to have personal copies of the classroom planning and planning specifically for Paikea every week, day to day changes to the timetable, as well as to know who was covering for whom when staff were ill or away from school.

None of this is particularly arduous or unreasonable; however it was not as simple as Kaiwhakaako handing over the information, with at least ten to fifteen minutes of discussion being needed. Paikea’s mother was doing her best, trying to ensure Paikea got all the allocated teacher aide and specialist teacher support legally entitled to, and the knowledge to support class learning at home. No criticism of Kaiwhakaako was implied. As Paikea was quite seriously ill too, meetings for Paikea’s mother were always very emotional, and this was observed to emotionally impact on the class teacher. Kaiwhakaako said that it was very draining to be having these emotional meetings on a weekly basis, but that it was understandable why Paikea’s mother wanted so much involvement. Perhaps a longer meeting after school once a month may have helped to remove this barrier towards a positive relationship. A decrease in positive attitude by Kaiwhakaako, towards how students on the AS impact on the class environment, seemed to reflect the reality that these two students required environmental changes, from the typical classroom layout and display methods, to succeed.

Kaiwhakaako: “We can’t display everything the class does, it gets too much for Hari, there’s too much sensory input from all the kid’s stuff. Once I sat Paikea and Hari on a table with two really quiet kids, it was much better, and Paikea has made good friends with the kids now, but I had to keep rearranging the room to find a way that worked for not just Hari and Paikea, but all the other kids too. Sometimes this was hard on the kids. It was fantastic that Paikea got to go on camp, so many benefits, but it was a shame that Paikea’s physical limitations meant that Paikea and the group got to miss out on some of the activities. It was good that you sat with that group at meals to support Paikea because it was so noisy in the dining room.”

In fact all of the teachers’ attitudes became less positive in at least one area by the end of the year. Ahorangi and Kaiako were less positive about the impact on themselves of teaching students on the AS. This was partly due to the emotional energy that these two teachers felt they had needed for their students on the AS over the school year. The following comments are extracts from our final conversations, which may illuminate aspects of their attitude shifts.

Ahorangi: “Honestly, it just takes so much out of me, it is so draining. I had to take stress leave days because I was so tired. I think maybe because Ira was so distressed, because of the family illness, and Iorangi was so stressed about next year for so much of this year, that I was trying to put in more emotional support for them than was possible. And I had no other support, no-one except you, I just couldn’t do it all.”

Kaiako: “Even though Tui’s behaviour has improved dramatically and things are so much better than they were, it was really hard work. I had to be on high alert all the time, so I could catch things before they spiralled out of control, because if I didn’t then there’d be parents coming in and complaining again to me and *the principal* that Tui was hurting their kids. I think because it was incessant for the first two to three terms, the yelling, swearing, hitting, kicking, it was just wearing.”

On reflection, this decrease in positive attitude was unsurprising to me, given the behavioural difficulties, sensory sensitivities, communication and way in which these students engaged with their learning. For example class trips and celebrations needed to take into account the ability of the students on the AS to feel comfortable, and so have manageable behaviour, while trying not to put a damper on things for the other students. Tui damaged a significant amount of school and class property over the year, affecting the environment quite directly, which may also account for Kaiako's increase in negative attitude in this area.

Kaiako: "I feel so bad for the rest of the class when something gets broken, it's not their fault and then they can't have access to those things."

For Kaiako, Tui's behavioural difficulties required a high level of alertness to manage effectively, which is also quite physically and emotionally tiring (personal communication Dr Nugent, 2012). Additionally, although Tui's family were not unsupportive, neither were they supportive, which meant that Kaiako was trying to change Tui's behaviour without active input from Tui's family/whanau. Some of this was around practical issues of Tui being picked up during class time, so teacher-parent interactions were difficult to arrange and some around the family feeling there were enough people involved already. Tui's mum would sign and send back forms and permission slips but would not attend meetings at school arranged by the school.

Hari's mum in contrast was very accepting and realistic about Hari's strengths and needs and supportive of the class teacher (Kaiwhakaako) and the school. This supportive relationship may have contributed to Kaiwhakaako's increase in positivity towards the impact of having students

with ASD on self. Both Kaiako and Ahorangi also saw the students on the AS as positive for professional development.

Ahorangi: “The more I learn about what works and what doesn’t through actually teaching students with autism, the better I will get at it. Reading it in a book is not the same as putting it into practice.”

Kaiako: “It’s like teaching students with serious behavioural difficulties, the theories are one thing, doing it is quite another. When you can see what you are doing is helping the kid learn, then you want to keep on doing that. You know you are getting better.”

All the teachers became more positive about the effect of a student on the AS on the rest of the students in the class, even Māhita who from time to time wondered if Marama would benefit more from being in a special school or unit. The teachers felt that the other students learnt valuable life lessons through being in a class with someone who is different over the course of the year.

Kaiako: “At some stage, somewhere, each of these kids will meet someone who is aggressive or being mean, if they can learn how to handle that now when they are young, it will stand them in good stead.”

Kaiwhakaako: “It’s about learning to live as a community, accepting people even if you don’t really understand them, trying to understand them. At the beginning of the year, no one would play with Paikea, Paikea was so different, and yet so different to Hari too. Over the year, the class began to understand that yes Paikea was different, but could still be fun to be around. Some of the class even began to understand what Paikea enjoyed and what made Paikea happy. They accepted Paikea as one of them, one of the class.”

Māhita and Ahorangi, even though they were very slightly more positive at the end of the year about the impact of students on the AS on the rest of the class, had some comments about things they perceived that affected the class negatively.

Māhita: “Spending one on one time with Marama takes away from the time I can spend with other students. If I have to keep explaining things, keep on going back to check, has Marama started the task, is Marama still on task, reminding and reminding, it takes away from the other students. At news time, whoever is Marama’s partner has to try and converse with someone who isn’t listening and won’t give feedback. If Marama has the same partner for more than a few days then than partner is missing out on the skills they could be developing during news time.”

Ahorangi: “It does take time away from the rest of the class, there is no getting away from that fact. I don’t resent it, it doesn’t bother me, but when I need to interact one on one constantly with Ira and Iorangi, of course there is less time left for everyone else. If the class is really absorbed in a science experiment and Iorangi does something stupid, it detracts from their learning. Mostly though I just felt upset when Iorangi was stealing from the class, it wasn’t right.”

Māhita was the only teacher who felt more negatively at the end of the year about the impact of inclusion on the actual student on the AS. This was almost certainly a reflection of the experience over the year.

Māhita: “No matter what I tried, Marama made such little progress. I don’t know, I mean Marama still has no friends, still won’t play with anyone and is still not really taking part in any class activities. Was this really the best place for Marama to be? I don’t know.”

This comment reflects the conflict between the educational and social ideology of fully inclusive schooling as a fundamental right, and Māhita’s view of the personal right of a student

to the most appropriate educational provision. For Māhita it seems as if the right to an education in the local school “overrides the question of whether full mainstream education is the best environment, educationally and socially, for all children with learning disabilities.” (McGregor & Campbell, 2001, p191)

Marama had made visible progress, though it was in small steps and hard to see at times. Māhita was frustrated by this as it left Māhita feeling as if more could have been done.

Māhita: “I let Marama down. If only I had a full time teacher aide and then one of us could have spent more time with Marama and maybe Marama would have made more progress.”

Staffing ratios in special schools are significantly higher than in regular classrooms, often being two adults to eight students. In a regular classroom ratios can vary from a maximum of two adults to sixteen students to a minimum of one adult to thirty students. Māhita’s class was mid way, but there were many of students other than Marama who required additional support with their learning.

As mentioned previously, over the year, Māhita’s willingness to work with Marama to facilitate progress seemed to diminish, although Māhita remained caring towards Marama noting changes in demeanour at various times. When I then applied the activity theory framework to Māhita’s relationship with Marama, I could see how the factors of time and school achievement targets had influenced and ultimately taken precedence over the time and energy needed to meet Marama’s needs within Māhita’s classroom.

Table 16 – Effect of willingness, time and school achievement targets

Factor	Willingness	Time	School achievement targets
Type	Artefact/Tool	Artefact/Tool	Rules
Observed/perceived influence on Māhita	When willing, more positive and upbeat, when less willing, less positive and more stressed	Māhita felt that Marama took “a lot of my time, needs so much 1:1 just to get started”	Māhita felt the need to conform to the school achievement targets, although being conflicted; “I am not sure that trying to ensure the class gets these targets is the most effective teaching I can provide” (for the students)
Effect on Māhita’s teaching of Marama	When willing provided more adaptations and 1:1 support, when less willing Marama was less able to access class tasks and activities and achieved less.	When receiving 1:1 support Marama was able to understand and participate in a much wider range of tasks (academic, routines, and social).	Marama could not achieve these targets and so was not brought back to task (using visual, verbal or physical prompts) when these tasks were the focus of the class.

It can be seen from the table 16 that Māhita’s effective teaching of Marama was influenced in a variety of ways by the artefacts/tools and the rules. These contradictions and tensions in teaching between the different aspects of teaching and learning are present for all teachers and it is the personal values and views that teachers hold that seems to influence what factors are prioritised by any one teacher. The influence of assessment policies on the teachers is discussed in more depth in chapter six.

Kaiako was the only teacher to have an increased positive view of the impact of inclusion on the actual student on the AS. This may be explained by the fact that Tui had made the most visible progress of all the students over the year, having started with very low levels of presence, participation and learning and ending up with near average levels (as for peers), as observed using time trial observations at the start and end of the year. Tui’s social and self-management skills had increased dramatically over the year, from hurting people multiple times a day, to the point where Tui was no longer physically hurting others every day. Kaiako

identified the benefits that being in the class had brought to Tui and this may well have been the reason for the increase in positive attitude around the impact of inclusion on the student on the AS.

Kaiako: “Tui has really blossomed this year. It was really hard work for the first two or even three terms, but then things just started to fall into place for Tui. Once Tui realised that they wanted to be a part of the class and realised this was possible, by following the rules I gave every day... just great. And look at how good Tui’s writing is getting!”

Having examined the teachers’ attitudes pre- and post-intervention using the IIQ, I came to the conclusion that, although the IIQ can give an indication of attitudes, it doesn’t give enough information to relate the attitudes to what the teachers are doing. This is because the IIQ doesn’t ask for contextual or supporting information about why the teachers hold those attitudes. Exploring why teachers hold those attitudes, which according to social constructionists are related to cultural and personal experiences (Ruffel, Mason & Allen, 1998), I used the AAT framework to examine teacher characteristics as I thought that each teacher could experience the same event and develop different attitudes as a result, probably because of other personal experiences and beliefs. Using AAT, I began to question the role of personal ethics, morals and beliefs in the attitude to teaching students on the AS, as this seemed to be the key to the differing levels of willingness to teach these students.

A teacher’s ethics and morals will influence their attitudes and beliefs in the same way that their experiences and socio-cultural background influence attitudes and beliefs (Ruffel et al, 1998). Prior to this research, I had never considered that a teacher’s ethics and morals may influence their beliefs, attitudes and willingness to teach in this context. Table 17 gives examples of observed effects on teacher attitude in the classroom context.

Table 17 – Observed effects of teacher attitude, skills and knowledge on the teaching of students on the AS

Teacher's;	Observed effect on their teaching of students on the AS
Attitude - positive	Kaiwhakaako had the most overall positive attitude towards the impact of having a student with ASD and observations that supported this showed: celebrations of students on the AS successes and progress achieved, deliberate attempts to modify class environment and tasks to ensure these students did not encounter further barriers, deliberate inclusion of these students within small groups for social benefit and high numbers of 1:1 explanations for these students.
Attitude - negative	Māhita has the most overall negative attitude towards the impact of having a student with ASD and observations that supported this showed; few celebrations of student on the AS's successes and progress achieved, no deliberate attempts to modify class environment and tasks to ensure this students did not encounter further barriers, and low numbers of 1:1 explanations for this student.
Knowledge level – high	Kaiwhakaako had the most knowledge about ASDs and how ASDs affect teaching and learning (as represented by questionnaire answers) and observations showed a variety of curriculum and task adaptations for the students on the AS and the use of IEPs to inform planning and teaching.
Knowledge level - low	Ahorangi had the least knowledge about ASDs and how ASDs affect teaching and learning (as represented by questionnaire answers) and observations showed just as high a variety of curriculum and task adaptations for the students on the AS and the use of IEPs to inform planning and teaching as Kaiwhakaako.
Skill level - high	Kaiako was the most experienced and skilled teacher of students with behavioural difficulties and taught the student with ASD with the most challenging behaviour. Kaiako implemented strategies to modify Tui's behaviour over the long term, with an emphasis on Tui being present and participating as much as possible. This required Kaiako to use strategies that were at odds with the school behaviour policy (as Tui's behaviour deteriorated under this system). Over the year Tui's presence within the class increased from 15 to 75% and participation within the class increased from 15 to 60% as evidenced by time trial observations.
Skill level - lower	Māhita had the least experience of teaching students with ASD which resulted in lower levels of skills due to a lack of understanding about why Marama was thinking, doing and being in those ways. Consequently Māhita was observed asking Marama to take part in activities without simplifying the instructions (all the other students understood the tasks), using complex language and multi-step instructions (again followed by all other students in the class).

Overall, the knowledge level of these teachers did not seem to be a major factor in the effectiveness of their teaching of students on the AS, whereas skills and attitude had observable effects. It is possible that, given a class in which students' have diverse learning needs, teachers cannot physically match their instruction to meet the unique characteristics of all students

(Cook, Gerber, & Semmel, 1997; Cook & Semmel, 1999; Cook & Tankersley, 2000). Teachers are then faced with the ethical dilemma of excluding some students from the limited range of learning characteristics that teachers generally address with their class teaching. This is addressed in the next section.

5.5 Interpersonal relationships and personal ethics/morals

Māhita's attitude that having a student on the AS in class is difficult may reflect the idea that students on the AS are hard to teach. This is in accordance with the idea, also expressed by Māhita, that students who do not respond well to typical teaching strategies require special schooling. "Students with disabilities were initially referred out of general classrooms because they were difficult to teach and did not respond favourably to typical instruction (i.e., fell outside of their teacher's instructional tolerance)" (Cook & Tankersley, 2000, p117). Inclusive pedagogy could be construed as teaching with a range of methods, or differentiated instruction. Garmon (2005) defined the following dispositions as necessary for teachers in order to have successful inclusive classrooms; open-mindedness, self-awareness and reflection, and a commitment to social justice.

Open-mindedness requires a person to be receptive to new information. The self-reflective individual will think critically of one's own teaching and make appropriate changes consistent with one's understanding of teaching and learning. Those teachers committed to social justice will attempt to achieve equity and equality for all students. (Blecker & Boakes, 2010, p436)

Demonstrating an aspect of social justice and illustrating a commitment to achieving equity and equality for all the students in the class Kaiwhakaako said;

I see all my students as individuals, who all have needs and strengths, who all deserve and have a right to a good education. My special needs kids are no different to the rest of the class in that respect. Struggling with self-esteem issues can be just as hard for students as struggling to write well or communicate fluently. Each kid sets their own goals at the start of the year, and we work towards those. Of course I help guide them in setting their goals, but they are personal and about striving to achieve what you want to achieve for yourself.

Teachers who have a commitment to social justice often hold a personal ethical/moral belief in the equality of all people and seem to work with that equity in mind. One of the factors that appeared to be most important in promoting diversity awareness and sensitivity in prospective teachers was having had personal experience of discrimination as a child or an adult (Garmon, 2005). I know that my experiences of discrimination have led me to be strongly committed to social justice and teaching children to respect people regardless of their differences and similarities.

Kaiwhakaako's personal experience of discrimination at school was no doubt one of the factors in Kaiwhakaako's drive to meet the needs of all the students in the class, and this was expressed in a number of conversations. In the following quote, Ahorangi demonstrated clearly feeling that other teachers still discriminate against students who appear to be non-academic;

Ahorangi: "Ira is going to be seen as stupid and left in the too-hard basket if we can't get a reader writer before high school. It's not right that Ira's inability to express all that knowledge inside through writing will mean that teachers won't see that Ira has all that knowledge just waiting to be expressed."

In a literature review of ethical and moral aspects of teaching Bullough (2011) reports that most of the researchers found that “teaching is essentially and fundamentally a moral enterprise, a few noting that the nature and quality of the teacher/student relationship informs virtually all that the teachers does, including how they organize and present lessons” (Bullough, 2011, p13). Van Kan, Ponte & Verloop (2010) reviewed the issue of morality in teaching, finding that researchers felt there were intrinsic and/or external morals involved. External perspective theories refer to the moral in teaching as a cultural set of values and virtues, which can be explicitly taught to teachers, students and pupils. “In contrast, theories that consider teaching an inherent moral practice have an internal perspective and view the moral significance of teaching as an inextricable part of teachers’ everyday practices,” (Van Kan et al, 2010, p1553).

Kaiwhakaako, who had negative experiences at school, because of teacher perceptions about ‘style of learning and being’, had considerably different perspectives about the equal worth of all students than those expressed by Mahita. Ahorangi’s ethics/morals seemed to be at least partly shaped by religious beliefs. Kaiako’s many years teaching students with severe behavioural difficulties had reinforced beliefs in tried and tested strategies to develop new, more socially acceptable behaviours in children and young people. These strategies were backed by a strong ethical/moral idea of the equity of all people.

Kaiako: “At the end of the day all the kids are kids. They bring their home experiences and values with them to school and our job is to help them learn appropriate skills, attitudes and ways of being in the world.”

Ethical/moral perspectives that promote positive teacher-student relationships between the teachers and their students on the AS may be significant factors in student achievement, and therefore effective teaching. Teachers really caring about their students on the AS, wanting

these students to benefit from their educational experience, may form more positive relationships with their students and this will influence how the teachers teach. “Once teachers really put a priority on care, justice and inclusiveness as moral purposes underpinning their teaching, everything starts to change,” (Hargreaves & Fullan, 1998, p35).

Keuster (2000) found that one of the key factors in successful inclusion for students with disabilities in her study was having positive interpersonal relationships with their teachers, as evidenced by positive interactions between them. In a 2006 presentation about Maori students with special needs Bevan-Brown data quoted Hill and Hawk’s (2000) findings that it was these positive teacher-student relationships “that the researchers identified as crucial to students’ learning. In fact they stated that teachers’ age, gender, socio-economic status and/or ethnicity did not matter to students; rather it was the teachers’ attitudes that the students considered most important” (Bevan-Brown, 2006, p15).

This finding that teacher-student relationships are crucial to the learning of Maori students “concur with other Aotearoa/New Zealand studies of Māori and Pasifika students and with overseas studies of minority group, at-risk and special education students in general” (Bevan-Brown, 2006, p15). If a teacher does not see any value in a student with ASD, or if a teacher does not have an ethical or moral framework of including that student, then that teacher is unlikely to take the time to form a strong teacher-student relationship with that student. Bevan-Brown goes on to suggest that positive student-teacher relationships are more crucial to learning for some students than students in general.

There are a number of reasons for this but chief amongst them is the connection between learning and the five “self-hyphens” that is, self-esteem, self-efficacy, self-identity, self-concept and self-assessment. Students from ethnic minorities and those

with special education needs have an increased risk of developing negative self-concepts. If their disability results in them having to struggle to achieve tasks others can do with ease, if it excludes them from participating in valued activities, or if the media regularly highlights negative statistics relating to their ethnic group, it is quite understandable that their self-concept and belief in what they can achieve is negatively affected. This in turn affects their ability to learn, not only because their motivation is lowered but also because cognitively they are not “operating on all pistons.” (Bevan-Brown, 2006, p16)

None of the teachers in this study were unwilling to engage their students on the AS and they all saw some value in teaching these students. I think that Māhita struggled the most with the idea of valuing Marama equally with the other students and this translated into an unwillingness to spend one to one time with Marama that may have helped to clarify tasks for Marama.

Māhita: “I can only do so much, when there is only one of me. Do I concentrate on the majority of the class or do I try and get Marama to really understand and really fully engage in something.”

Emma: “It is difficult and I accept that in my role now I can chose to work one to one with my designated student or with them in a small group, but I have found that if I work with two or three students they often benefit from the same strategies and support that I am using with my students on the AS.”

All of the teachers involved in this research talked about the importance they placed on interpersonal relationships with their students, but had varying degrees of success in developing strong teacher-student relationships with their students on the AS. This reflects the difficulty in forming and sustaining relationships with these students, for whom social and communication difficulties were present. Where a teacher did not demonstrate a solid understanding of these

difficulties they struggled to form these strong positive interpersonal relationships. However, Kaiwhakaako and Ahorangi, who both overtly stated that all their students were of value as children and learners, were both observed trying to ensure each of their students felt special and valued.

Kaiwhakaako: “It is so important for all the kids to know I care about them and I want them to do well, and I believe they can do well.”

Ahorangi talked about needing to ensure “the whole class understands all people are different, some are good at some things and some are good at others and that we all need help with things at some point.”

The teachers with ethical/moral values that resulted in their saying that they valued all children equally as learners with potential formed positive inter-personal relationship. Māhita struggled to view Marama as a learner and was unable to form a strong positive relationship with Marama.

Table 18 explores the observations that were found to support the positive effect of the teachers having positive inter-personal relationships with their students on the AS. These are contrasted with the observations that demonstrated the negative effect of a teacher having a negative inter-personal relationship with their students on the AS. This is far from a clear cut finding as Māhita liked Marama and worked hard to try and develop a positive interpersonal relationship, but felt unsuccessful due to the lack of reciprocity.

Table 18 - Observations related to the subjects and their instruments/tools

SUBJECT		INSTRUMENTS/TOOLS
Classroom teacher		<i>Teacher time and energy</i>
OBSERVED EFFECTS ON OBJECT/OUTCOME (Where teacher has positive interpersonal relationship with student on the AS)		
A lack of teacher time and energy led to less dedicated 1:1 time and support for students on the AS, with teacher using other strategies to keep student on the AS engaged and involved.	An abundance of teacher time and energy led to more dedicated 1:1 time and support for students on the AS to ensure student on the AS is engaged and involved in meaningful learning	
OBSERVED EFFECTS ON OBJECT/OUTCOME (Where teacher has negative interpersonal relationship with student on the AS)		
A lack of teacher time and energy led to less dedicated 1:1 time and support for students on the AS, with student left to own devices	An abundance of teacher time and energy led to more dedicated 1:1 time and support for students with whom the teacher has a positive interpersonal relationship, student on the AS may be left to own devices	
SUBJECT		INSTRUMENTS/TOOLS
Classroom teacher		<i>Teacher knowledge and understanding of difference and individuality</i>
OBSERVED EFFECTS ON OBJECT/OUTCOME (Where teacher has positive interpersonal relationship with student on the AS)		
A lack of teacher knowledge and understanding of difference and individuality led to a mismatch between teaching style of teacher and learning style of student on the AS with teacher continually trying new teaching methods to try and engage student on the AS.	An abundance of teacher knowledge and understanding of difference and individuality led to highly individualised programmes for the student on the AS	
OBSERVED EFFECTS ON OBJECT/OUTCOME (Where teacher has negative interpersonal relationship with student on the AS)		
A lack of teacher knowledge and understanding of difference and individuality led to a mismatch between teaching style of teacher and learning style of student on the AS with teacher feeling that the student on the AS was unable to make more than minimal (if any) progress.	An abundance of teacher knowledge and understanding of difference and individuality led to a rich and diverse teaching and learning environment in which the student on the AS was able to match learning style with teaching done from time to time.	
SUBJECT		INSTRUMENTS/TOOLS
Classroom teacher		<i>Teacher attitude towards and willingness to teach the student on the AS</i>
OBSERVED EFFECTS ON OBJECT/OUTCOME (Where teacher has positive interpersonal relationship with student on the AS)		
A negative teacher attitude towards the student on the AS led to low expectations for student on the AS but continued interactions and inclusion. Low willingness to teach students on the AS with whom a teacher had a positive interpersonal relationship with led to minimal curriculum or teaching strategies adaptations for that student on the AS, but continued interactions on a more social level.	A positive teacher attitude towards the student on the AS led to high expectations that the student on the AS would make progress and has potential to achieve. A willingness to teach the student led to individualised plans being set and implemented as well as the use of teaching and communication strategies just for that student on the AS.	

From the observations in table 18, it can be seen that a positive interpersonal relationship does affect the object/outcome for the student on the AS in a positive manner. This concurs with findings from Bullough (2011) and those presented by Thomas (2011) during the Asia Pacific Autism Conference in Perth. Positive relationships did seem to improve the effectiveness of the teaching of students on the AS and negative relationships decreased the effectiveness and the overall inclusion of the student on the AS in the learning environment.

Māhita and Kaiako struggled to form reciprocal positive relationships with their students on the AS, but they continued to try throughout the year. Marama did seem to enjoy adult company but had limited conversational and social skills, with very few apparent interests in life, making it hard for Māhita to connect with Marama. Tui exhibited quite aggressive and volatile behaviours including physical and verbal aggression towards others. At the start of the year Tui was hurting others several times a day, meaning that Kaiako needed to find a way to keep other students safe whilst developing a positive relationship with Tui. From observations Tui and Marama both seemed to have a positive attitude towards their teachers, but were not able to interact and sustain interactions in a way that was meaningful to their teachers.

Paikea and Hari, though older than Tui and Marama, also struggled to interact and sustain interactions in a meaningful way. This improved during the year as they attended a targeted social skills group and Paikea went to school camp with the class. Kaiwhakaako was able to continue to develop a positive relationship with these students even when there was no verbal or other feedback from the students.

Kaiwhakaako: “It just takes time, I’ve known Hari for years and it took two terms or more for Hari to appear secure and happy around me. I’m sure Paikea just needs more time to settle in and feel a belonging to the class and to me as teacher.”

These summaries demonstrate the complexity involved for teachers in trying to build and sustain positive relationships with students on the AS. When the students themselves find it difficult to make and sustain friendships and positive relationships from their own side it can be hard for teachers to continually put effort in to trying to ensure the students understand that they are valued and cared for and cared about. Communication difficulties can mean that the positive student-teacher relationships can appear quite one sided and this can also mean that the teachers can feel they are not creating a positive relationship, when in fact they may well be doing so. However, these positive student-teacher relationships are able to positively influence the students' educational experiences and so are worthwhile pursuing.

Marama presented as less interested or engaged than any of the other students in this study. Observers would often say that Marama looked bored or 'like a wet weekend'. These visual cues made it very difficult for peers and adults to want to interact enthusiastically with Marama as there was no reciprocity. When talking to someone who appears not to be listening, or appears bored, many people will infer that the person is bored or does not want to listen and so give up on the interaction. Māhita continued to interact with Marama and tried hard to build a positive relationship but rarely had any positive feedback from Marama. Māhita expressed the view that this was frustrating, confusing and disappointing.

Tui, Hari, Iorangi and Ira were all quite demonstrably affectionate at times and all gave a degree of reciprocity in interactions with their teachers. This made it easier in some ways for their teachers to know when these students felt cared for and about. Although Paikea was very emotionally expressive, these expressions were not necessarily indicative of Paikea's feelings. For example, if asked about how the weekend was, sometimes Paikea would suddenly start

crying. This crying did not indicate the weekend was unpleasant or that Paikea did not want to talk about the weekend. It only indicated that Paikea was unable to respond in a meaningful communication at that moment.

Kaiwhakaako understood that Paikea's communication was at times meaningful and at times not indicative of what Paikea may be trying to communicate. I also observed that Paikea would cry for unknown reasons and that Kaiwhakaako would try to think through whether the crying was indicating distress or not. Paikea could not respond to yes/no questions, but could respond to some more open questions if they were around special interest topics. Kaiwhakaako demonstrated understanding of the interaction between Paikea's communication, emotional state and ability to engage and showed a willingness to base as much learning and oral communication as possible around special interest topics. This was only possible because Kaiwhakaako had this knowledge and understanding of Paikea and a desire to ensure Paikea developed a sense of belonging and became a valued class member.

Kaiwhakaako: "Paikea is only interested in family and animals, if I want to see how much Paikea knows about something, I need to base it on animals or family. For example if we are doing poetry, I wouldn't ask Paikea to write a poem about the weather because I'd get strings of words back. However, if I asked Paikea to write a poem about a dog, I know Paikea can write words about dogs, and I'd be able to see how much Paikea understands about writing poems in the style we are talking about and having modelled."

I feel that these comments demonstrated not just an understanding of some of the aspects of Paikeas's communication difficulties but also a willingness to work with Paikea in ways that suit Paikea rather than suiting the teacher. This willingness to adapt the curriculum tasks to

such an extent seems to indicate to me the moral framework and ethics of social justice and the framing of education as child centred, where all children are valued (Langford, 2010).

Ahorangi's students on the AS had quite high levels of functional oral communication and lower levels of written communication. Iorangi in particular had minimal functional written communication skills. Ahorangi understood this and did not make value judgements about Iorangi because of it. Instead, Ahorangi modified tasks so that Iorangi could present learning, whether knowledge or skills in ways other than the written word. Again, this for me seemed to demonstrate ethical social justice in action.

Ahorangi: "There is no point in me asking Iorangi to do the same work as the rest of the class, it would just frustrate everyone. If Iorangi can draw the knowledge or make a model to demonstrate the principal then I know what Iorangi knows, and Iorangi knows the knowledge is being seen and valued."

Additionally, because we know that stigmatised groups of students can fail because teachers expect them to fail (Jussim & Harber, 2005), we have an ethical duty to ensure teachers do not presume students will fail when they can succeed. This implies that teachers need to understand that people on the AS can and do succeed in the workplace, that they can and do raise families and can be and are responsible members of society (Grandin, 2010). If teachers can view and hear success stories of adults on the AS who struggled in school they are more likely to have realistic and higher expectations of students on the AS.

Marama's father's attitude may have frustrated Māhita, but he was being realistic. As a child he had failed at primary school, struggled through secondary, graduated from university and was now working full time and married with two children. Marama's father could see the same path

for Marama and did not want the school to intervene to ‘support’ his child, because he perceived the developmental path to adulthood differently to the school. However, Māhita could not see adult success happening without school based success and so found it difficult to see that Marama could succeed in the workplace despite making little progress at school.

Māhita: “There is so little progress, I just don’t see Marama achieving. I wish I could do more to help, but I don’t know what will help.”

In many ways this ethical duty to ensure teachers do not underestimate the ability and potential of their students on the AS could be placed at the heart of the IEP process. As families and other support staff have input into the review and the goal setting, their knowledge and understanding of future possibilities, gained through personal and/or lived experience are invaluable to teachers and the student.

All of the teachers in this project had lower expectations for the students on the AS than the other students in their class. None of the teachers had previously heard of successful adults with ASDs, other than ‘Rain Man’. This meant that the teachers did not expect their students to go on to have well-paid careers, or even, for most of the students on the AS, any careers.

When analysing the skills and knowledge responses of the teachers and the observations of their interactions with the children using the AAT framework, it became clear that willingness/attitude/ethics/values of the teacher was the most important factor in the classroom. No matter how good the existing skills and knowledge of a teacher in the areas of teaching and learning, classroom management etc., if the teacher was not interested in teaching a particular child or group of children, whether because they saw no point or they felt that it was beyond their ability/training to do so, then it didn’t matter how skilled or knowledgeable they were, that

student or group of students did not receive effective teaching. This was reflected in the analysis of the significance of positive interpersonal relationships between teachers and the students on the AS.

On the other hand, those teachers who wanted to do the best they could for a student often sought out sources of new knowledge to try and attain new skills, in order to meet the needs of that student. At times all the teachers said they wanted to teach all the students in their class, but felt that they did not have the time or energy to learn new things and try out different strategies. Kaiwhakaako and Ahorangi both fell into this category for the majority of the year, willing to teach all the students in their class, and if given information, rather than having to search for it, were happy to read it, and, if strategies were simple and not time-consuming, happy to try their implementation.

Teachers are often faced with conflicting demands and expectations, such as the need to meet the needs of all students in a diverse class whilst trying to ensure academic achievement standards are met. Parents, other teachers, the school and the Ministry of Education may all have different ideas about what any one teacher should be prioritizing or how they should be teaching. These choices seem to have an observable impact on the effectiveness of the teaching of students on the AS. Prioritising the needs of the students over the current school or national rules and regulations can be the difference between high and low levels of participation and learning for students on the AS.

I wanted to find out how each teacher resolved these conflicts and which rules they followed and which they didn't. Chapter six discusses the influence of a student focus on teacher choices in regards to their students on the AS.

6. Chapter 6 - Student focused?

Over the school year I identified a number of mediating influences on teachers in regards to their planning, teaching assessment and behaviour management of their students on the AS. The data revealed a large number of conversations about school and national policies and how these did not necessarily work for their students on the AS. Two policies in particular came up in conversations repeatedly with a number of the teachers; the school behaviour policy and the school and national assessment frameworks. In relation to these two policy areas a key finding was that teachers ignored some or all aspects of a policy in order to use particular teaching strategies that they felt were more student focused. Examples are given below, using conversational extracts that illustrate this point. Additionally, I was surprised to discover that support and feedback were strong mediators in regards to teacher choices and this will be discussed in section three.

Kaiako: “Sometimes, it’s important to do what we as teachers think is best, rather than what we are told to do by, for example the government with national standards. You know I don’t think the school behaviour plan is any use for Tui, in fact it makes things worse.”

Kaiwhakaako: “I know that I am supposed to stick to my planning and get through all these academic things every day but it is far more important that the class deal with issues as they arise, so that means nearly every day after play we need to sit down for half an hour and sort it all out. I think it drives the principal mad, but otherwise the kids are all over the place and no work would get done anyway.”

Ahorangi: “I’m not going to carry out formal assessment on Ira, why should I, it won’t tell me or anyone else anything useful. So Ira can’t write, that would mean not even achieving level one in the assessments, but Ira can work at much higher levels as long as

there is no writing. I know I am supposed to, but I'm not going to, it will just make Ira upset.”

Māhita: “These achievement targets, there is no way my class can get there. I just don't know what to do. Who should I focus on?”

Teachers not only have their own views, which are shaped by previous experiences as both teacher and as learner, but they work within school, community and national contexts that may offer up differing or even opposing views on aspects of education. Teachers have a choice then to act according to their view or the prevailing norms or policies of the school and/or the nation.

Coming from teaching in schools where the prevailing pedagogy was the importance of learning through play for young children, Māhita was now teaching in a school that did not share this view. Māhita obtained permission to have sessions for the students to learn through play, though not as frequently as in previous schools. Over the year, Māhita found that curriculum demands increased to the point where the developmental/play learning sessions had to decrease exponentially.

Māhita, early in the year: “I am pleased I can have sessions where the children learn through play, of course I have to call it developmental time, and I had to *ask the principal* for permission to do this.”

Māhita, late in the year: “It's a shame the children can have so little time to learn through play, but there is so much structured curriculum stuff to get through, and just me to facilitate that.”

Conflicting views over the use of play as a learning tool may seem a minor point. However, these sorts of conflicts are at the heart of the largely unspoken debate about what education is

for and how it should be delivered. I hoped to explore teachers' views around policy implementation and the link with meeting the needs of their students on the AS. Over the year there were a number of conversations on this theme and I have chosen a few for inclusion in this thesis because these few were repeated over and over again with minor variations and they are able to illustrate the point that these teachers were passionate about their teaching and student learning, whilst showing both adherence to and ignoring of policies.

The United Nations Education, Scientific and Cultural Organization (UNESCO) guidelines on Inclusion in Education report that not only is it “of crucial importance that all children and young people have access to education. However, it is equally important that they are able to take full part in school life and achieve desired outcomes from their education experiences” (UNESCO, 2009, p6). Though not defining ‘desired outcomes’ the guidelines suggest that “while subject-based academic performance is often used as an indicator of learning outcomes, ‘learning achievement’ needs to be conceived more broadly as the acquisition of the values, attitudes, knowledge and skills required to meet the challenges of contemporary societies” (UNESCO, 2009, p6).

Currently educational success in Aotearoa/New Zealand is being promoted by the government as academic achievement of national standards and NCEA qualifications, with students who do not achieve that said to be failing or being failed (Parata, 2012). Although the key competencies within the curriculum talk about things like ‘managing self’, there is no specific mention of the spiritual or emotional requirements of students. As schools are devolved the prioritising of particular aspects of the curriculum is a matter for each individual school’s board of trustees (Morton & Gordon, 2006). However, there is a legal requirement for national standards to be implemented which I thought may impact upon teacher choices.

This chapter will discuss the findings related to how teachers perceived the choices they made in relation to the school behaviour policy and then national standards/the school planning and assessment policies. Māhita was the only teacher who prioritised policies which were not in accordance with personal beliefs around being student focused. The other teachers, myself included made decisions that were driven by our personal ideas around how to best meet students' needs. I will offer up possible explanations about this difference using AAT tables to illustrate the mediating factors and how they interacted.

6.1 Teacher focus on students' social, emotional and self-management skills

Teacher views about the importance of social and emotional development were the key to whether or not these teachers chose to teach these skills explicitly, whether within the curriculum context or using other strategies. All the teachers perceived that there was prioritisation of literacy and numeracy within Canterbury Primary and talked about how this influenced their choice to promote social and emotional learning or not.

Emma: "I can see the emphasis on literacy and numeracy in the classroom displays and in the time devoted to these within the school day."

Ahorangi: "I really want to focus more on social skills and even identifying and managing emotions, both Iorangi and Ira really need it, but I can't. There isn't time within the school day, there are too many other things on the curriculum that I have to cover. I'm going to keep asking *the principal* if you can set up a social skills group which Ira and Iorangi can go to, it is important and I just don't have time to teach it in class."

Māhita: “It’s so good to have the play sessions running. I think it really helps the children learn how to interact socially and manage their emotions in a natural way. Most children pick these up naturally before they come to school, but for the ones that haven’t like Marama, it gives them the opportunity to learn how to play with the others without having me telling them what to do all the time. But I have to fit everything else in, it is getting really hard to do all the literacy and numeracy curriculum and then have time for play.”

Kaiako: “I can’t just send Tui out because the school behaviour plan says to, we’d never have Tui in class, how is that going to help Tui learn to get along with others or for them to learn tolerance and acceptance? How will Tui learn anything if they are sitting in *the deputy principal’s* office all day?”

Kaiwhakaako: “Ok, so I don’t get as much of the curriculum covered as other teachers, but this class have lots of needs, they find it so hard to manage themselves and we need to work on that. Everyone in class needs to feel valued, accepted and a member of our class. That means we do a lot of talking through problems and this gets in the way of doing the academic stuff at times.”

There is a dichotomy between the national curriculum’s assumption that learning is a social activity and that all students’ social development will be met within the curriculum and the idea that students on the AS need to be explicitly taught social skills. The teachers in this research talked about their students on the AS not having the same level of social interactions as their peers, and express the desire to improve this. “Explicit teaching of social behaviour needs to be part of the individual plan for any child or young person with ASD throughout his or her life,” (Ministries of Health and Education, 2008, p.103).

The Aotearoa/New Zealand ASD guidelines recognised that “explicit teaching of social behaviour needs to be a part of the individual plan for any child or young person with ASD throughout his or her life” (Ministries of Health and Education, 2008, p103) The evidence

based best practice suggestions to meet this target are that social behaviour teaching needs to take place in as natural a way as possible, with opportunities for students to generalise and solidify social skills. During my early life, both at home and school, good manners and politeness were stressed and taught explicitly. I still apply these rules within my everyday life. It can be difficult for these skills to be taught in a natural setting like the playground, unless teachers or teacher aides are directed to do so during what would otherwise be a break (or another teacher's break, so that playground duty is covered).

The national curriculum theoretically enables schools to teach students whatever they need, as the principles behind the curriculum clearly state that students should be at the centre of teaching and learning; that students should be provided with a curriculum that engages and challenges them, is forward-looking and inclusive, and that learners learning needs are addressed (Ministry of Education, 2007). However, the curriculum stresses a number of more formal and traditional subject areas to be taught. Schools tend to emphasise these due to a variety of factors such as national standards, parental expectations and available teaching resources. Social skills are often then only explicitly taught if they are included on a student's IEP. IEP contents depend on school policies and the way input from families, students and teachers is balanced.

Some schools run values education, or other social skills programmes, alongside their academic curriculum as they recognise that many students and not just those on the AS struggle with social skills and ethics. Canterbury Primary had a class involved with the 'Roots of Empathy' project, which explicitly teaches pro-social and nurturing skills and a social skills group for one term for six students.

Kaiwhakaako: “The advantage of classroom social skills lessons are that students are not singled out as being different and can feel more included than if they attend withdrawal classes. All the students can then become aware of the difficulties some students face in learning and applying social skills, whether they have autism or not. It’s a shame this isn’t prioritised.”

IEPs were found to be the vehicle that these teachers utilised to ensure their students on the AS did work towards at least one social and emotional skills goal a term, in line with the ASD Guidelines of social behaviour being explicitly taught for these students. IEP targets around sense of belonging, social and play skills were among those chosen. The IEP extract in figure 19 is an example of how the IEP was used to focus on social, emotional and self-management skills that the IEP team identified. The team comprised Kaiwhakaako, Hari, Hari’s mum and myself as ORs teacher.

Figure 19 – IEP extracts – Hari

<p>Current strengths: Hari is really enjoying school now and is always in class on time ready and waiting, also working really hard now.</p> <p>Gains made since previous IEP: Starting work more quickly, completing most work more and even more class participation, social skills have also really improved. Hari is now able to socially belong to the class</p> <p>Long term goal: For Hari to be able to work in a group and sustain a conversation.</p>				
Short term goal	Specific learning outcome and how we will know it has been achieved	Strategies to implement goal - summary of Curriculum Adaptation, Teaching Strategies, Resources etc	Who will be responsible	Dates strategies implemented
For Hari to learn 3 or 4 conversation starters.	Hari will be able to hold a conversation for 2 exchanges each person with an adult using one of the conversation starters.	To teach Hari 3-4 conversation starters. To model this for Hari, then prompt Hari, then set up events for Hari to practise.	Emma & Kaiwhakaako	5 minutes in group 4x week

The outcome of the teaching choices made following this IEP was that Hari's mother was very pleased as Hari was able to have longer and more varied conversations with her. Kaiwhakaako identified that Hari's peers also responded more positively to Hari, as Hari was now initiating interactions with them.

However, the conversation starters were initially introduced in a withdrawal group setting, where all the students were following the Superskills programme (Coucouvanis, 2005). This is the group that Ahorangi had requested for Ira and Iorangi, which was taken by myself. I would have preferred to run the programme within the classrooms, but this was not allowed as I was informed that it would detract from time available for the formal curriculum (personal conversations with SENCO). Once Hari was familiar with these new sentence starters, Kaiwhakaako provided opportunities for them to be used within the classroom.

Kaiwhakaako: "I don't think I can get the introduction to these new phrases done enough in class and in both one to one and small groups. I think it would be better to get Hari used to them and to getting responses back from other kids in your group before we try working on this in class. What do you think?"

Emma: "That sounds fine, it fits into the general social skills programme anyway and because the group is small and the kids all do maths together every day, they know each other really well. I'll let you know when we are starting to work on it, because it won't be for a few weeks yet as we are still working on greetings and intention to interact."

Kaiwhakaako: "Hari's mum is so excited that Hari might get to interact with the other kids more in the playground, it would be great, especially after last year when Hari had such negative experiences interacting with the others."

Kaiwhakaako initially struggled to support Paikea because there had been a number of incidences where Paikea would get very distressed and cry in class and Kaiwhakaako felt that

they needed to get to know one another better so that the meaning behind the tears could be found. Paikea was unable to explain the distress or tears as oral language expression became more difficult not just at these times, but in trying to talk about them too. The following IEP is from term three and reflects both Paikea’s growing confidence and friendship skills and Paikea’s mother’s wish to focus on literacy development.

Figure 20 – IEP extracts – Paikea

<p>Current strengths: Paikea is great at transitions and is willing to give new things a go and is now positive about making friends.</p> <p>Gains made since previous IEP: Paikea has made friends and consistently plays with various children at playtimes. Paikea can now consistently finish two pieces of work a day with less adult support than last term. Paikea has learnt the sounds of the alphabet and can use this new knowledge for initial letter sounds. Paikea can teach another simple skill to a peer. Paikea can read at level 18 as long as it is an animal story. Paikea now looks and acts like a part of the school and appears to have a sense of belonging and feel happy, though unable to verbally express this yet.</p> <p>Long term goal: To be able to participate across the curriculum and make progress in all areas.</p>				
Short term goal	Specific learning outcome and how we will know it has been achieved	Strategies to implement goal - summary of Curriculum Adaptation, Teaching Strategies, Resources etc	Who will be responsible	Dates strategies implemented
That Paikea will be able to learn 3 playtimes games – shuttleball, hopscotch and 4 square.	Paikea will be able to play and/ OR verbally explain how to play shuttleball, hopscotch and 4 square outside.	Paikea will develop her ball throwing and catching skills as a sensory break in work time. Games to be taught explicitly by Kaiwhakaako with clear rule explanations (can use photos, role modelling) once skills mastered.	Kaiwhakaako – games, Emma, Teacher aide	During fitness During sensory breaks
That Paikea will be able to talk about what she is doing	Paikea will be able to use complete sentences to tell adults or peers factual information in response to an open question.	Role modelling – using open questions and visual prompts. Opportunities to give oral recounts.	Emma, Teacher aide, mum & Kaiwhakaako	5 mins daily each

This IEP illustrates the willingness of Kaiwhakaako to implement teaching strategies designed to specifically meet Paikea's needs, for Paikea within class time, where possible using small groups. These choices reflected Kaiwhakaako's belief that the class had a number of students who would benefit from involvement in these strategies and an understanding that students not on the AS can also have some of the same needs as students on the AS.

Kaiwhakaako: "Paikea and Hari aren't the only students who need help learning how to play at playtime. Even though the kids are in the senior school now, some of them really struggle with that whole fair play thing. Having me teach some of those aspects to Paikea explicitly gives me the opportunity to teach those things to all the kids that need it."

This prioritization of social development is interesting. Kaiwhakaako was using the needs of a student on the AS to set up learning for a wider group of students, however when I looked at data relating to Ahorangi this was not the case. Ahorangi talked about being unable to find the time to meet the social learning needs of the students on the AS because of the academic demands of the curriculum, and on the other hand.

Kaiwhakaako: "Without feeling good about themselves and their ability to belong, the kids don't learn as well as they could. I need to focus on what the kids' need, not what random national targets say the kids should need. Teaching everyone how to get along helps the kids to feel good about themselves and their relationships within class. It helps to create the feeling that this is a safe space to be who you are."

Ahorangi: "I know Iorangi and Ira really need to learn social skills, but I just can't fit them in, the curriculum hardly fits into the school day as it is."

Analysis of the data in this study suggested that when teachers believed that their students on the AS were or had the potential to be valuable members of the class and of society; they were

more open to the notion of equipping those students with the knowledge and skills to be accepted by society, while expecting the class to accept and value the student on the AS. This can be seen in the previous quotes from Kaiako and Kaiwhakaako, who both talked about acceptance.

Kaiwhakaako: “The whole class needs to learn to relate to one another, to take care of each other. I don’t think the spectrum kids are the only ones who find it difficult. Our job is to help them all learn these things.”

Emma: “I have observed a number of sessions where you are talking with the class about standing up for others in relation to playground incidents involving Hari or Paikea.”

Kaiwhakaako: “Not just in relation to them, though the playground is difficult for Paikea who can upset others without understanding why, and then in turn Paikea gets really upset and angry at their responses. I think bystanders have a duty to intervene in bullying type situations to stop people being upset or hurt, and if not they are part of the problem. With Paikea it is more complex, the class need to understand why Paikea plays in that way and how they can respond in a manner that doesn’t escalate things.”

This dual pronged approach to inclusion, promoting the value of each individual within the class to the class, while ensuring the participation of individuals in meaningful learning activities designed to maximise their potential, can change inclusion from having students physically present, but not emotionally included, to an inclusive setting aiming towards equity for all (Grandin, 2010).

Kaiako: “When the class learnt to accept Tui and to ignore all the low level annoying things, like shouting and swearing, they learnt that just because someone is different to them doesn’t make that person a bad person. Look at how Tui can now come on class trips, sit with the rest of the class, join in at games. These can all give Tui a sense of belonging and the class can see that Tui has really good qualities too.”

Kaiwhakaako: “All my kids are different, they are all individuals and it’s important for me to teach them to value their differences. Yes Paikea and Hari are different, but so too are all the others, look over there. Now, that student was so angry last year that I could never get them to work co-operatively, now look! Once the kids know that everyone can do something, everyone can achieve in some way, they can look for it, share in it and celebrate it.”

Another aspect to self-management for all students is how they handle their emotions. Research has found that children who do not feel safe and/or who are hungry, do not learn as well as those who are safe and well fed (American Psychological Association, 2011; Weinreb, 2002). Many students on the AS exhibit anxiety in school, which can be an expression of their not feeling emotionally or sensorially safe. The teachers could articulate their observations around this anxiety:

Ahorangi: “I know when Iorangi is leaving the room constantly they are anxious, but I am not sure what about, and when if I ask then Iorangi starts getting frustrated and shouting.”

Kaiwhakaako: “Hari is usually really laid back, but what was happening just now, that running around, we only usually see that if something is going wrong, its like a calming thing to get all the anxiety out. Because it stopped when the bell went, I left it, if it hadn’t I would have gone to talk to Hari, to see if I could do anything. There is no point in asking Hari to sit down and work when this happens, it just makes Hari run around faster.”

Kaiako: “Tui arrived in a fairly good mood this morning, but as soon I mentioned swimming, uh oh. Tui had forgotten their togs and was getting anxious about not being

allowed to go. Honestly no-one would have been able to work until the togs had been sorted out. Tui would have yelled louder and louder and louder until we all had a headache!”

Māhita: “I don’t know if it is anxiety, but it looks like it. Marama just seems to sort of blank out, just like they are not there any more. And then ten, twenty minutes later sort of comes out of it, usually when we have changed our activity. It does mean Marama misses lots of learning opportunities.”

The teachers noticeably focused on the emotional and physical safety of all the students after the initial September 4th 2010 earthquake. Prior to this, provision to meet the emotional needs of students varied much more within the school, perhaps because there was no related school policy. The behaviour policy was concerned with putting in place consequences for physical violence and/or aggression rather than determining causal factors or presenting strategies for learning to self-manage. In our conversations, the teachers often focused on possible reasons for their students’ behaviours, rather than sanctions to be used when a particular behaviour was exhibited. For example, Ahorangi felt that Ira’s high anxiety prevented Ira from being able to focus on listening or doing and so Ira was unable to learn when highly anxious.

Ahorangi: “Ira is so unsettled at the moment, so worried about their family. It’s not surprising behaviour, and to a large extent work has gone out of the window. Once Ira is able to be calm again, I know that things will settle down. When Ira wants to talk, I make sure I am available to talk. It’s important that not only Ira, but all the students, learn how to handle things. I try and make sure to talk to them and let them know they can talk to me every day.”

After the September earthquake, Marama became far more anxious, which Māhita noticed and through conversations with Marama and Marama's mum found out the source of the anxiety.

Māhita: "I know Marama is very upset... keeps on talking about the house could fall down in the next quake, direct quotes from Mum, it's not helpful for Marama to hear her worries. But then I guess now we know how to reassure Marama. Of course it will be harder for Marama to learn when all their energy is focused on whether or not there will be another aftershock and whether or not their house will fall down."

Marama could have been so anxious because some people on the AS are thought to be hypersensitive to the emotional state of those around them (Urwin, 2011) and there was a considerable amount of anxiety following on from the initial earthquake. Hari was the student who demonstrated the least anxiety, which Kaiwhakaako felt was as a result of Hari knowing many of the class members and adults, as the class was largely unchanged from the previous year, and having been supported to learn to self-manage distress the year before.

Kaiwhakaako: "Last year Hari started to refuse to come to school. Mum told us Hari felt bullied or teased but Hari wouldn't talk to anyone at school about it. We worked on getting Hari back into school and into class and many of the students were in my class last year with Hari. I thought it was important for Hari to have some stability and so I asked to take the class again, with a few changes for some of the kids that needed to be with a different class. This year Hari is so much happier, even playing with peers at lunch time. Just knowing that the kids like and accept Hari has made so much difference to Hari. Hopefully that will happen for Paikea over the coming years too. It took a long time, over a year for Hari to feel safe. I think Hari knows I am there and I like and value everyone, I think we worked through this together last year."

Tui had an unsettled home life and Kaiako felt that it was to be expected that Tui would exhibit difficult behaviours if the weekend had not gone smoothly.

Kaiako: “Everyone acts out when they get stressed enough, all we can do is keep the boundaries clear and so provide that safe environment that Tui needs in order to learn new strategies for expressing distress and/or anger.”

Within the realm of student self-management, the other policy that caused the most consternation amongst these teachers was the school behaviour policy, which followed a three step system. Step one was a warning, step two time out in class and step three time out in a neighbouring class or with the deputy principal. In previous years, students with challenging behaviour were given individual plans, but in 2010 these were replaced with the application of the three step system being universal.

Kaiako resisted implementing the behaviour policy, feeling that it was not in the best interests of the students.

Kaiako: “I just don’t think it is right, you can’t apply a policy like that (the behaviour policy). You have to work with each individual, everyone responds to something different.”

Emma: “Behaviour is dealt with differently in different schools, some have individual approaches and some seek consistency across all classes and all students.”

Kaiako: “Consistency of what, behaviour expectations or sanctions? This school does so many things right, but this is not one of them. I don’t understand why this has been implemented.”

Emma: “What is the core issue for you? Why is it a problem?”

Kaiako: “Tui has no desire to be in class, so if we use the time out system, it is in their interest to get to step three as many times as possible throughout the day. I need to create a desire to join in and be part of the class, so that this becomes worthwhile. How can I compete with sitting with the deputy principal, doing nothing? It doesn’t meet Tui’s needs at all in any way. I want to focus on what is right for Tui. It’s not like it will be easier for me by not sending Tui out, as I’m sure you know it is bound to get worse before it gets better.”

Emma: “So what are you going to change so that you can be focused on Tui’s needs?”

Kaiako: “Focus on the long term, on the big picture. The class have to learn to accept Tui and Tui has to be enticed into wanting to join in. That means if I use time out it has to be in class, so Tui can see what they are missing.”

As expected by myself and Kaiako, this strategy took about six months but was highly successful and Tui’s presence within the group went from less than 15% at the start of the year to over 75% at the end of the year. However, part way through the year a teacher aide reported an incident involving Tui to the principal who seemed to be quite annoyed with Kaiako for keeping Tui in class and not sending Tui into time out outside the classroom.

When the principal told Kaiako off for this, Kaiako said “I stood my ground and just told the principal that Tui needed to be in class as Tui saw going out of class to be with the deputy principal as a good thing, and it just didn’t work for Tui.”

In order to say this, Kaiako needed to have a great deal of belief in their own ability to manage Tui and to effectively change Tui’s behaviour, as the case worker from Group Special Education had also recommended the school policy be followed for Tui. Both the school and the case worker were focused on the safety of the other children, which although paramount,

cannot legally (Education Act 1989) be used to deny a child an education, which it effectively was, according to time trial observations and teacher reporting. Kaiako saw this and knew that if the children in class could be taught how to respond with calmness, kindness and understanding to Tui's difficult behaviour and Tui could be tempted to want to be part of the class, all the children within the class would have learnt valuable life lessons and skills.

Kaiako believed that for inclusion to work, "children (and adults) need to understand that people are all different and that although some behaviours are not acceptable the person is still a valuable and worthwhile human being who needs to be treated with kindness."

Although this kind of teaching is clearly valuable and in keeping with the school values it was perceived as incompatible with the drive for standardised behaviour management, which seemed to be being developed as the core of school management at Canterbury Primary. My theory was that teachers made choices within and influenced by their personal and working contexts to tailor their teaching to try and meet the needs of their students (Fullan and Hargreaves, 1991). This perception of choice is framed by the idea that effective teachers will try to do what they perceive is best for their students, regardless of the rules or guideline.

Kaiako's experience of working within a behavioural unit was "that it is important to teach a child the skills needed to replace undesirable behaviour with desired behaviour and that time out of the classroom is just not going to do this." Kaiako also expressed the view that best practise states, and experience had backed up, that "changing a child's behaviour takes time, but that the older a child gets, not only is it more difficult to change behaviour but it also takes longer."

Kaiako felt that it was vital to support Tui to change behaviour now in order to give Tui real access to learning, before Tui got too old for change to even start occurring within one school year.

Kaiako: “The longer we take giving Tui new skills to replace undesirable behaviours the more learning Tui is going to miss out on.”

Interestingly Kaiako’s position was in agreement with the UNESCO guidelines; “an inclusive school must offer possibilities and opportunities for a range of working methods and individual treatment to ensure that no child is excluded from companionship and participation in the school.” (UNESCO, 2009, p17) In having a blanket policy, the school was excluding Tui from participation in class-based learning with peers, whereas Kaiako was encouraging and setting up a way for Tui to feel a sense of belonging and for Tui to dramatically increase participation.

How the classroom is managed depends upon the class teacher, their relationships with the students and school management and, if relevant, other support staff. I wondered how the teacher and students were affected when school or management policies were in conflict with the teacher’s idea of effective class management. Each teacher had to decide whether to do as they were instructed on a national level and/or at a local level - difficult in this particular school as at a school level some national policies were rejected, such as national standards, but others were not, such as a focus on literacy and numeracy.

Teachers needed to weigh up their personal beliefs and various other factors. As mentioned, one of the possible consequences of not doing what the school asks a teacher to do is not having your contract renewed at the end of the year. This was observed to be an influencing factor for non-permanent staff members. Fixed term staff talked about how difficult it was to

find a job and how much stress and effort that took. This seemed to influence teachers to follow school policies that they might not follow if they had permanent contracts. Some of the teachers reported that they felt that they could and should be able to get away with some things, because they had been employed for many years. These teachers suggested that the newer teachers may have to adhere to policies more closely.

Another possible consequence of being seen not to follow the school policies and practices was being rebuked by the principal or other senior managers. It was rare at Canterbury Primary for teachers to be rebuked in any sort of public manner, with the senior management team placing an emphasis on mentoring staff to support them to be as effective as they could be.

These two possible consequences alone seemed to be powerful drivers to influence teacher behaviour, though not necessarily in a manner I would have predicted. I had presumed this would encourage staff to 'do as they were told to do', but what it seemed to do was ensure that some staff made a huge effort to be seen to be doing one thing, but actually to do another. An example of this concerned a behaviour plan for Ira mentioned in chapter four, given to Ahorangi by senior management. As previously discussed Ahorangi felt this behaviour plan was not working, nor was it actually workable. (n.b: I agreed with Ahorangi's assessment of the situation.) However, Ahorangi did not want to take the issue up with management feeling that it would be seen to be challenging authority, instead Ahorangi chose to work with me to try and find a solution.

On reflection I should have realised that this was a delicate situation, and that I could have guided Ahorangi to take the plan back to the author to discuss and revise. I could have helped Ahorangi to come up with a coherent rationale for why the plan was not working and some

ideas for the new draft. However, I did not do this because I did not have a good relationship with the author and I wanted to help Ahorangi when I was asked to.

Some other teachers had the school behaviour policy displayed fairly prominently in their classroom. They could be heard explaining it to their students and talking positively about it in the staffroom. Not all of these teachers were actually implementing the policy, even after explaining it to their students. Teachers who were not implementing the behaviour policy talked about it not meeting the needs of the individual students, the class or themselves as teachers, as shown in the extracts from Kaiako previously.

Kaiwhakaako: “One size just doesn’t fit all. I agree there should be clear rules and clear consequences, but if Hari hit someone, it really wouldn’t be the same as if Jess did! Jess hits out all the time and is still learning how to use other strategies, whereas Hari rarely hits and in fact I’m sure would only ever have done so in situations of great distress. Why should I deal with them both the same way?”

This school-led idea of all children being able to be managed in the same way seemed to me to be at complete odds with the assertion at the start of the year that children learn differently and bring different attitudes, values, behaviours and expectations to school with them. However, by the end of the year that assertion had disappeared, along with the words differentiation, inclusion, special needs and learning difficulties disappearing from the 2011 staff handbook, to my dismay and the distress of Kaiwhakaako.

Runswick-Cole (2011) suggests that it remains the case that for children with special educational or behavioural needs to be included in their local schools the children must fit in and not disrupt the education of the majority. Kaiwhakaako was going further, expressing the thought that the 2011 staff handbook reflected a “long present culture of not bothering to meet

the needs of any staff who may be a bit different. This is just being extended to not bother to meet the needs of any children who have extra needs.” Kaiwhakaako felt that although the school employed staff who were “a bit different”, these staff were expected to “fit in and not disrupt anything about the school”.

Kaiwhakaako was very clear that all the individuals in any class deserved to have their needs met, and in class Kaiwhakaako would try as hard as possible to ensure that they all the students made social, interpersonal, personal and academic progress, in conjunction with support staff and whanau/families. Kaiwhakaako also expressed the view that what happened behind the classroom’s closed door, stayed behind the closed door and management only needed to know what it needed to know. Kaiwhakaako had formed this view over a number of years, which had been spent “battling to get support for myself and for the kids”.

This could have been understood as an over-reaction on Kaiwhakaako’s behalf or as a view that had a solid basis. Previously the school had found a mentor for Kaiwhakaako, as the management said that, “although as a teacher Kaiwhakaako is very good with the special needs kids, Kaiwhakaako can’t manage the behaviour kids and the class is very noisy and Kaiwhakaako needs support.”

At that point in time, Kaiwhakaako stated they felt that the school did not provide any support and that it should. This illustrates the effect that strained, difficult or antagonistic relationships between management and teachers can have over time. The school was paying a mentor, in the recognition that existing relationships were damaged and the school would not be able to support Kaiwhakaako as effectively as an outsider and yet Kaiwhakaako still felt angry, let

down and resentful. The school was pleased with the mentoring and felt that Kaiwhakaako was now more effective with students with behavioural difficulties.

Kaiwhakaako's opinion was: "Now I just don't go and ask the principal for help any more, there's no point. I just manage things by myself. Anyway the kids are doing much better, it just takes time to get to know them and know what their problems are, why they are acting they way they are acting, to build a relationship with them, so they know that I care about them and they can trust me."

For Kaiwhakaako, the basis of effective teaching was a positive interpersonal relationship with the students and once this developed, which took time, then Kaiwhakaako felt more confident and effective. As discussed in the previous chapter this view is identified within recent research (Bullough, 2011; Thomas, 2011).

During this research project, Kaiwhakaako, who had learning difficulties, often talked about being outside of the staff group. Kaiwhakaako felt that their learning difficulties placed them as both different from the rest of the staff and as able to empathise with and effectively teach others who had the same or similar learning difficulties. I observed this empathy and this recognition of self in the students a number of times over the year, but most clearly when Kaiwhakaako's class was on school camp.

On the bus back from camp, Kaiwhakaako expressed thoughts about this saying that, "I can see myself in the kids, how awful it was to not fit in, how horrible people can be, and still are sometimes. I want the best for my kids, I want them to know how valuable they are, how special they all are."

Kaiwhakaako rarely came to the staff room and never came to staff functions, finding these situations difficult and stressful – something many staff feel, but do not act on. Kaiwhakaako felt perceived as different to, other than, and that it seemed a reasonable response to isolate self from others and work for the within the classroom as effectively as possible. This is not to say Kaiwhakaako did not co-operate with colleagues, which happened regularly, but Kaiwhakaako’s personal expertise or experience were rarely acknowledged and Kaiwhakaako was upfront about this.

Kaiwhakaako: “Despite everyone knowing I have a learning difficulty, no-one has ever asked me for assistance teaching someone with the same learning difficulty. It’s just ignored; I am just expected to fit the mould of ‘teacher’.”

Teachers are often perceived as collegial and supportive, but although it can be true in a general ‘we care’ kind of way, in fifteen years I have only once experienced a school where staff truly all cared about each other, and even that changed with a turnover and the presence of a teacher perceived as ‘different’. Canterbury Primary seemed no different to many other schools, with small groups of teachers genuinely supportive of each other, but the whole staff not a cohesive unit. There is no reason why a school staff should be any more or less cohesive than any other workplace. For example, it is unlikely that all staff in a hospital form a cohesive unit.

Teachers at Canterbury Primary generally taught in physical isolation from one another, though group planning was encouraged and there were some team teaching activities. Where teachers had another adult in the classroom on a regular basis, it was either a teacher aide or a specialist support professional such as a speech language therapist, special needs teacher or occupational therapist. Some of the teachers in this study enjoyed working with teacher aides within the

classroom, whereas others preferred the teacher aides to work with students outside of the classroom.

Kaiwhakaako: “Sometimes the other kids get disturbed when there are teacher aides in the room, especially if they are doing something different with Hari or Paikea.”

Māhita: “I wish I could have a teacher aide in the room all the time, they are invaluable, and so much more support could be provided for not just Marama, but some of the other children who are struggling.”

Kaiako: “Tui has a number of different support adults for different things. Some of them work in class and some go to another space, I can see why the speech therapy is done somewhere else, but sometimes it would be good to have the adult helping Tui more in class.”

Ahorangi: “I’d love to have teacher aide support for Iorangi and Ira, they’d benefit so much. When either of them need a bit more explanation of a task or support to start a task, or Ira needs a reader/writer. I do as much as I can, but there is always more that can be done.”

Canterbury Primary used a formal monitoring and evaluation system to ensure that the senior management were kept aware of any issues with both teaching and student pastoral care in the school. This system consisted of reviews of all planning materials and formal classroom ‘walk throughs’ by senior teachers and school management as well as regular student focused pastoral care meetings to which teachers could refer student issues. All the students on the AS within this study were reviewed at each pastoral care meeting.

I worked with a number of students reviewed at pastoral care and all the students on the AS in this research were discussed. Difficulties in learning and behaviour were noted as well as any

significant gains made. This influenced some of my teaching choices. The other teachers also made choices about they taught and when they taught it.

Of course, the most creative and dynamic teachers will always find ways of resisting *curriculum* guidelines and adapting them to suit their own purposes. But the reality for most ordinary teachers is that they do not. For them, detailed guidelines are not frameworks of opportunity, but prisons of constraint, (Fullan and Hargreaves, 1991, p35).

I used the AAT framework to investigate why teachers made choices which conflicted with school and/or national policies, what contextual drivers framed their actions, and what the effects were on the students on the AS in this study.

6.2 Student focus within whole class planning and assessment policies

The context and rules relating to teaching and learning are governing factors for what teachers teach, to whom, when and why. National guidelines, the curriculum, national education policies and national standards represent the national context of rules, providing tension that pulls teaching and learning in certain directions. The contradictions between national and school policies posed difficulties for some teachers, especially where policies were viewed by the teachers as not meeting the needs of a particular child or group of children. Teachers questioned the specific policies or framed them within a wider context.

Kaiwhakaako asked; “What is school for? Who decides? Who says that art shouldn’t be as important as maths?”

Emma: “What do you mean?”

Kaiwhahaako: “Well, we have the numeracy rotation, every day almost an hour is dedicated to maths, but how much time do we get for art, drama, music? Think about the skills you develop in the arts, think about the language development, the opportunities to explore social issues...”

Within the AAT framework, community and rules can mediate teacher activity, by for example holding teachers accountable at a local and a national level. The introduction of national standards in 2010 was the topic of many conversations with these teachers, and demonstrated that even though the school were not implementing standards, they were still influencing teacher choices.

The national standards policy was introduced after an election pledge, and with the full backing of the National-led government. However, there was a large response from researchers and educational academics (Elley, 2010; Flockton, 2010), teaching and principals’ unions (New Zealand Principal’s Federation, Primary Principals Association, New Zealand Education Institute (NZEI)) and individual teachers to this policy, criticising it as ill thought out, poorly planned and unlikely to lead to improved outcomes for students. This created a media storm with sound bites from both sides meaning that parents were left wondering why teachers and others were against a policy that promised to improve learning outcomes for students.

As previously mentioned this policy is similar to America’s “No child left behind” policy and the UK’s national testing policy. Neither of these had demonstrated any increase in academic achievement among students (Downey, 2010; Kim & Sunderman, 2005). All of the teachers in Canterbury Primary also seemed to be against the implementation of standards, particularly the idea of reporting to parents using specific language.

Kaiako: “I’m not doing that, ever. Why would tell a parent their six year old was below standard? And the poor kids who were working towards that level, to be labelled below standard, a failure, how would that make them feel? Talk about promoting a self-fulfilling prophecy!”

Ahorangi: “This is just silly, the children above standard will stop trying because there is no higher achievement and the children below standard will have their self-esteem crushed! How is that going to raise achievement? What about children like Ira who can’t write? I’m not going to put them in a box labelled failure.”

As mentioned previously Ahorangi did not use any formal assessment with Ira, despite this being school policy, expressing on a number of occasions that to do so “would not tell anyone anything useful. However, Ahorangi struggled with the choices around how to meet Ira’s needs best. This was due to the complex nature of education, as some people who believe they are being inclusive in their attitudes and practises may actually be supporting exclusion. Ahorangi felt that this line was difficult to navigate in terms of teaching Ira to write.

Kaiako: “I know that Ira is intelligent, I don’t need written work to prove it, but I worry that the next teacher will and that my not making Ira write will affect things negatively in the future. What if my not making Ira write makes their time at school more difficult long term? It is so hard to know what to do to do the right thing by Ira. But at the same time, when I do try to support Ira to write the quality of work is so poor, so much less information in there than Ira’s drawings or when Ira just talks to me. So if I ask for writing then I don’t know what Ira knows, only that I can’t read the strings of letters and symbols all joined together.”

The following AAT table, where the IEP goal prioritised for Paikea was to learn to throw and catch a ball illustrates some of the mediating factors involved in Kaiwhakaako’s teaching choices. This goal was chosen as Paikea was unhappy during ball games and expressed a sense

of isolation and distress that a lack of skill in this area was preventing inclusion into not just formal ball games, but playtime games too. Teaching Paikea to throw and catch a ball was expected to, and did take several weeks of 1:1, followed by small group work, which required Kaiwhakaako to release Paikea from other activities for five to ten minutes every few days initially. As a result, Paikea learnt to throw and catch a ball with reasonable accuracy and was able to join in formal and informal ball games, but missed out on some formal academic tasks. Paikea enjoyed being part of these games and the team had delivered effective teaching that met one of Paikea's identified goals/needs. Table 19 explores the contextual factors involved in Kaiwhakaako's choices and actions in regards to this one activity.

Table 19 - AAT exploration of contextual factors mediating Kaiwhakaako's decision when and how to teach Paikea ball skills

Contextual factors affecting object	Type of contextual factor	Effect of contextual factors on outcome if prioritised over other contextual factors
Paikea's Individual Education Plan – Goal to learn to throw and catch a ball	TOOLS	Prioritising Paikea's IEP goal ensured that Paikea had opportunities to work towards and/or achieve this goal, which was set by the IEP team (myself, Kaiwhakaako, the SENCO, Paikea and Paikea's mother). This had the effect of supporting Paikea's goal to be able to join in ball games in fitness and during playtimes (achieved) and improve the amount and positive play interactions with peers by Paikea (also achieved). The IEP team all felt the IEP supported and delivered effective teaching of Paikea.
National Guidelines on ASD	RULES	If these guidelines had been prioritised then Kaiwhakaako would have had to ensure that Paikea received a highly individualised curriculum stressing social and communication goals. Paikea's IEP did include elements of this even though Kaiwhakaako had not read the ASD guidelines.
School testing and assessment schedule	RULES	As Paikea was ORs funded some school tests were optional, however others were not. Prioritising these would have meant Paikea doing the assessments/ tests when the rest of the class did and not using this time to focus on achieving the IEP goal of ball skills. This would have resulted in Paikea having less time to achieve the goal and therefore the goal would have taken a lot more of the term to achieve. Additionally formal testing had been tried and resulted in Paikea crying and frustrated and nothing being done towards the test.
Special Needs teacher and teacher aide	DIVISION of EFFORT	These adults are able to support Kaiwhakaako with teaching and learning for Paikea, through Kaiwhakaako's direction. They were used to support the IEP goal by providing 1:1 teaching and then small group work on ball skills whilst Kaiwhakaako continued to teach the rest of the class.

It can be seen in table 19 that because Kaiwhakaako and the IEP team had chosen to teach Paikea one on one initially that Paikea missed out on some other class activities. During the IEP, it had been noted down that Kaiwhakaako would teach Paikea the ball skills during fitness, but this was abandoned as Paikea had become very distressed and cried during class fitness sessions when finding the skills difficult to learn. Withdrawing Paikea from class for five or ten minutes, especially when the class were doing formal assessments that Paikea was not undertaking provided some time for Paikea to learn to throw and catch without feeling scrutinised by peers and provided the confidence boost to ensure small group practise was less stressful.

Some of the times Paikea had one to one sessions were during the twenty minutes of class silent reading. During this time I had observed Paikea flicking through pages of a book randomly, sometimes looking at the pages and sometimes not. Paikea read with me weekly in my role as ORs teacher and we had a literacy goal around reading too. However, it was extremely difficult for Paikea to concentrate for twenty minutes and going outside to work on the ball skills goal ensured Paikea was actively engaged in learning.

Kaiwhakaako: “I don’t have time to read with all the kids that need one to one each day, so I do three or four each day. It’s not ideal but that way I can also keep track of how those readers are doing. In some ways having Paikea go out for ball sessions with *the teacher aide* alone initially was to keep Paikea’s stress down, but now that Paikea is going out with a small group it means that the kids who read really quickly or that I’ve already read with that week get to go out and get to know Paikea better. Once everyone knows and understands Paikea better I think that Paikea will be less teary and hopefully happier in school.”

Interestingly, in order to ensure that Canterbury Primary was seen to be meeting the educational goals for their students whilst refusing to implement national standards, teachers in 2010 were required to carry out significantly more formal assessment and reporting than in previous years. This resulted in national standards influencing teacher decisions even though national standards were not being used.

The school continued to use its own reporting system which clearly stated if a child was working towards, meeting or easily able to work at certain levels rather than the “below standard, at standard, above standard” indicated in the national standards information. The teachers felt that their report’s language was clear and less pejorative than the national standards reporting language. The idea of labelling children below standard was particularly singled out.

Kaiako: “Most of our special needs kids would be labelled as failures right from the word go.”

Kaiwhakaako: “What is the point in telling a child they are ‘below standard’, it sets them up to feel bad about themselves.”

Ahorangi: “If you are working towards, it shows a positive thing, that you are getting there. If you are just below standard it seems to imply you are useless and won’t get there.”

However, despite not taking part in national standards, the question of what is taught, when, why and how became observably important at Canterbury Primary half way through the year. Teachers started talking about the need for 75% of their students to achieve a specific level in literacy and numeracy by the end of the year. Māhita in particular, was extremely concerned about this, feeling that, due to the number of special needs students in the class, there was no

way to achieve this without stopping all other teaching and only ‘teaching to the test’. Although Māhita expressed the idea that ‘teaching to the test’ would increase the likelihood of the class reaching this target (which Māhita stated was set by the principal), Māhita felt uncomfortable about this style of teaching. Māhita said this was “not good teaching, teaching is about a rounded education, more than just being able to do one or two particular things. I am more effective when I am teaching to the class needs.”

Māhita and I talked about what best practise meant; Māhita felt that the most important aspects are “a well-balanced curriculum, ensuring that learning was both fun and captured the imagination of the majority of the class for the majority of the time”. Māhita asked me, for my professional opinion as to how to achieve the 75% target with that particular class. I talked about the options that I could identify; “to teach to the test or to continue teaching as normal, or to focus on the 75% of the class most likely to achieve the target, but in any case to also work with the principal to discuss the core issue.” Māhita’s main concern was that over 25% of the class had learning needs of one type or another which made them unlikely to reach the target, even when sustained effective teaching for the rest of the year constituted the core issue on this topic. (N.B. I agreed with Māhita’s perception about the likelihood of those students reaching the targets.)

Kaiwhakaako completely ignored the targets, feeling “that it is more important to have high but realistic expectations of all students over the year, to aim to support them all to achieve and make value added gains” than it was to focus narrowly on the literacy and numeracy assessments/tests to see if students were ‘succeeding or not’.

Ahorangi viewed the numeracy test as literacy based and worried that students who struggled with literacy were not able to demonstrate their maths skills on the NumPa test, as they found the questions hard to interpret, a particular issue for Iorangi. Ahorangi expressed the idea that ability judgements about students change as students move from primary to intermediate to high school and that “these ability judgements go from solely teacher-based through observation and informal assessment to solely test score-based by the end of high school”. This opinion is validated by the recent comments by the current Minister for Education about exam results being the defining factor of success in high school (Parata, 2012).

The following table describes the effect of various mediating factors experienced by Ahorangi in the context of teaching and learning for Ira. This illustrates the negative aspects of the testing and assessment schedule for Ira.

Table 20 - AAT analysis of mediating factors affecting effective teaching of Ira by Ahorangi

Factors affecting object	Type of contextual factor	Effect of contextual factors on outcome if prioritised over other contextual factors
School testing and assessment schedule	RULES	As an unfunded student Ira was required to undergo all school testing and assessments (and if/when national standards are introduced those too). As Ira was only able to read very basic texts, Ira could not understand the tests/assessments unless they were read. Additionally, Ira’s writing was very difficult to decipher and did not showcase Ira’s knowledge at all. Prioritising the school testing and assessment schedule would have resulted in Ira being ‘officially’ working at a much lower level than in reality. Should Ahorangi have succeeded in obtaining a reader/writer for Ira, a more accurate assessment of ability could have been possible.
Ira’s Individual Education Plan	TOOLS	Focus on Ira’s goals would have individualised teaching and learning opportunities to maximise effective teaching of Ira.

In actuality Ahorangi could not administer tests/assessments in any meaningful manner unless they were read out to Ira and so made the decision not to. When/if Canterbury Primary does implement national standards Ira would have to take the tests and assessments and would be seen as having a very low ability in Mathematics and English. Although Ira's reading and writing are at a very low level, Ira demonstrates great intelligence when talking, creating and/or drawing. Ahorangi wanted to ensure future teachers knew this.

Ahorangi: "Ira is so bright, knows so much, it would be awful if overall judgements were made based solely on how well Ira can read or write. Formal testing just doesn't show the whole picture with Ira, its not student focused enough."

In addition to assessment policies, Canterbury Primary had some formal guidelines around how teachers should teach. For example it was emphasised that when teaching, teachers should introduce each session to the students using WALTs. WALTs are short statements which explain what the children are learning (and sometimes why). Māhita, Kaiako, Ahorangi and Kaiwhakaako all used the WALTs when introducing sessions. These were often displayed somewhere in the room under either the label WALT or the full "We are learning to..." label.

WALTs aligned with the school planning and linked to the national curriculum, they represented clear indicators of what teachers were planning the children would learn. The use of the WALTs was in line with school policy about how children learn, and how teachers should teach. To some extent all the teachers personalised the WALTs for their children, though this was easier to see in some classrooms than others. For example, in Māhita's room each child had their own WALT in their writing book, which was geared to their personal stage of development – this however was not always reflected in the class instructions given at the

start of each writing session. Māhita would usually remind the children to look at their own WALT in their writing book when they started their task.

Kaiwhakaako did not have differentiated WALTs visible, but it was clear from the way work was explained and handed out to the class that different children were working on different things. This included social and interpersonal skills being taught as an integrated component of the curriculum in a similar ethos to that of Kaiako and Ahorangi, but implemented very differently. Kaiwhakaako did not view the class as a group of similar beings, but rather a collection of individuals to be nourished and cherished in a myriad of ways as suited each child.

When the class was doing academic group work, there would always be an element of socio-personal skills being learnt. For example, when Hari was placed in a group, the group would be reminded that they needed to direct Hari's focus to the task and to get Hari to either verbalise or draw relevant things. This was a difficult thing for students to do, but important in order to facilitate true inclusion of Hari into learning tasks. This facet of teaching and learning was not clearly indicated in Kaiwhakaako's planning, which just gave the subject or topic name and a one line descriptor of the session. In making the group responsible for this, Kaiwhakaako was teaching them that "different people can contribute in different ways, and some people need more support than others, but that everyone's contribution is worthwhile".

When placing Paikea in a group, Kaiwhakaako's teaching points, other than the academic ones, were for the group to ensure that Paikea took turns and was gently and kindly put back on track when becoming fixated on irrelevant points. This teaching point was more about teaching children "the need for tolerance and respect of and for difference" than about

facilitating Paikea's participation, as Paikea was rarely able to understand what was going on and could not respond with understanding to closed yes or no questions at the beginning of the year. Paikea's peers however, were learning that this did not mean that Paikea was less valuable than them, just that Paikea was still learning skills that they took for granted and so required patience and understanding from them.

Māhita followed the curriculum plan and school teaching and learning guidelines more literally and rarely used alternative strategies in class, except for a phonics programme brought from a previous school and developmental learning (learning through playing) time, both of which had prior agreement from the principal. Māhita brought both of these teaching philosophies from previous teaching experience in the UK.

Marama had little understanding or overt awareness of the regular class routines like what to do when arriving at school, the routine to transition from class to playtime/break time/lunchtime and how back to class time again. This resulted in Marama missing out on learning time and potential socialising time. Using the data gathered from relevant observations and conversation with Māhita around Marama's routines and transitions, I reframed the information using the AAT framework. This enabled me to undertake a detailed analysis of the context to look at what happened when Māhita prioritised different aspects of the context. The table on the following page summarises these mediators and their effects.

As can be seen from the table, Marama's level of comprehension and ability to start a task were the overriding determinants of outcomes regardless of which contextual factor was prioritised. The next table shows the tensions experienced by Māhita when looking to implement Marama's IEP goal of learning to follow routines at school.

Table 21 - AAT analysis of the mediators influencing effective teaching of Marama by Māhita

Mediating factors affecting object	Type of contextual factor	Effect of contextual factors on outcome if prioritised over other contextual factors
National Curriculum academic requirements	RULES	Marama was unable to start a task or stay on task without 1:1 adult support. Marama could follow other students' actions, but often missed out crucial aspects. Prioritising the academic requirements of the national curriculum was not possible for Māhita with Marama unless there was adequate division of labour as Marama could not access the content or tasks without extra 1:1 support. If Māhita had tried to prioritise academic learning without extra 1:1 support, Marama would have struggled to make any sense of the tasks and struggled to participate or learn, resulting in ineffective teaching.
Part time teacher aide and myself as researcher	DIVISION OF LABOUR	This directly affected what Māhita could teach to Marama as well as how. If Māhita or another adult was able to support Marama, the level of participation and learning was much greater than without support. However, Māhita had no control over how much support was available from the teacher aide or myself. Māhita could provide extra 1:1 support when the rest of the class were able to work without guidance for a few minutes. As discussed elsewhere, this was very infrequently due to the age of the students.
School 'WALT' policy	COMMUNITY / TOOLS	All 'learning' tasks need to have 'WALTS' however, developing the ability to follow routines is not easily structured into formal learning described by, we are learning to... Marama did not always understand what the WALT was referring to due to Marama's literal understanding of language and low level of concept understanding. This made it difficult for Māhita to use WALTs meaningfully with Marama unless they were very simple and phrased specifically for Marama, e.g. "Marama is learning to write Marama." Otherwise they were ineffective tools.
Marama's Individual Education Plan goal to develop ability to follow routines	TOOLS	If this was prioritised Marama may have been able to participate more in class, instead of spending time waiting for others to do things that could be copied and then needing to go back and do things that were missed out of the routine. E.g. morning break routine was not understood and so Marama had less time with peers during play and was often last back to the class afterwards, missing instructions.

It can be seen from table 21 that Māhita faced a number of tensions that compounded each other in the context of effectively teaching Marama just one of the IEP goals, developing the ability to follow routines. A WALT could not be written for this in a way that was meaningful

to Marama, so a WALT could not be presented to Marama for this. The lack of a WALT made the goal hard to slot into the formal class planning for the week/term and the lack of a dedicated support adult for Marama on any kind of regular basis meant that Māhita had to implement strategies for working towards the goal, or it would not worked towards. This then placed the activity in conflict with the national curriculum academic requirements and constrained what Māhita felt able to teach Marama, when and how.

Māhita expressed a number of views about the perceived low expectations of children that seemed to be held in Aotearoa/New Zealand, versus the higher expectations for reading, writing and numeracy held in the UK. However, these were at odds with Māhita's frustration about the need for 75% of her class to achieve literacy and numeracy 'school targets' by the end of the year.

If Māhita had felt allowed to use play to teach social development as a given, it may have been that Marama would have been given a wider range of individualised activities more suited to the goals on Marama's IEP. Certainly, Marama would have been given many more opportunities and strategies to learn to follow routines as the class transitioned from 'play to formal learning at school'.

Māhita: "The children need to learn a lot of things when they first start school, what to do, when to do it, that sort of thing. When I have the role play areas set up, like the shop or the café, the children can learn all kinds of skills that transfer into the more formal sit on your bottom and learning. But without this as an ongoing thing I need to find other ways to help Marama learn some of those basic skills needed in order to learn."

However, as previously discussed Marama's family/whanau did not want extra support for Marama's development at school. They came to the first IEP meeting of the year, declining to

attend further IEP meetings. However, both myself and more often Māhita met with Marama's mother. Neither Māhita nor I nor the SENCO could facilitate the family's acceptance of the idea that Marama would benefit from extra support at home or school. As discussed in chapter four, this meant that Māhita did not have support from Marama's family to provide any extra supports for Marama to enable Marama to learn more easily or in more in-depth.

“I was just like that as a child and I really struggled at school too. It doesn't matter, Marama will turn out fine, I did,” Marama's Dad said at the first IEP meeting. “I don't want anything extra or different for Marama, just leave Marama to do whatever. I hated school, I failed too, but I did fine at university, so it'll be ok.”

This then placed Māhita in a difficult position, caught between the requirements of the school to support students who struggle to make progress and the family preference to have no interventions. People on the AS perceive that they learn and think logically; however this logic may be different from that of neuro-typical people (De Clerq, 2011). For Marama's father it appeared to be a logical given that Marama did not need any extra support or intervention at school. In contrast it was a logical given to Māhita and the school that Marama needed extra support. In this case Māhita talked with the principal who agreed that the school would follow the wishes of the family, but that this needed to be clearly documented. As a result Māhita was going against personal experience, national guidelines and conventional pedagogy, which all demand extra support for students who are struggling to make clear progress.

Many traits of the AS including focus on a narrow range of interests, the ability and interest in repetitive tasks, suit university studies, particularly those in science or technology, but are unsuited to primary school where students are required to change tasks frequently and engage in a large amount of peer interactions (DePass, 2011). Māhita's class did change tasks every

fifteen to thirty minutes of the day, which must have been difficult for Marama who could take ten minutes to settle down and start a task.

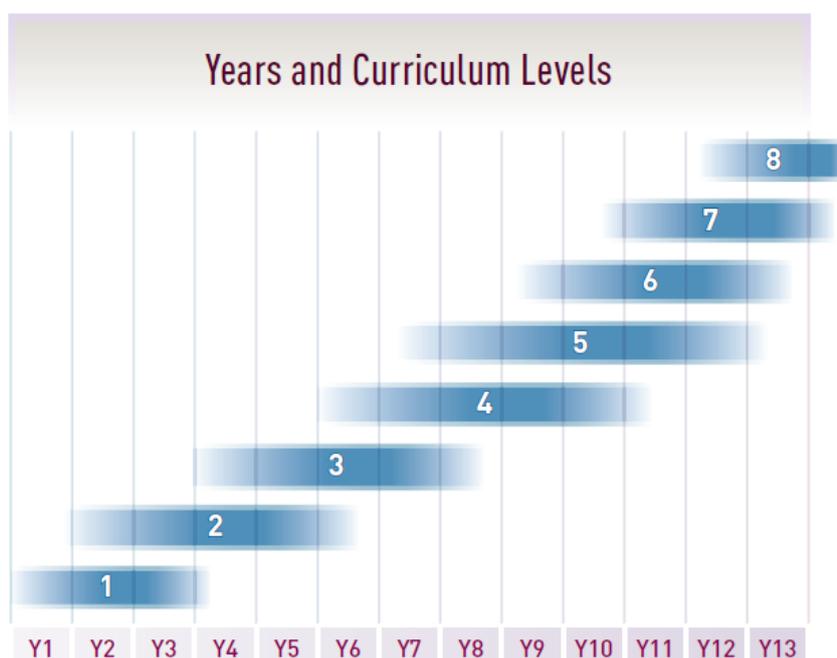
Looking at the table below it can be seen that the tensions inherent in deciding what to teach and how to teach are not just governed by the national curriculum and school teaching and planning policies, but are also influenced by families/whanau and students (Burnett, 2003). The table summarizes the effect different contextual factors place on the goal of teaching Marama to increase reading and writing skills.

Table 22 – Mediating factors present when Māhita plans to teach Marama to read and write at the same standard as expected of Marama’s peers

Mediating factors affecting object	Type of contextual factors	Effect of contextual factors on outcome if prioritised over other contextual factors
National Curriculum levels of achievement	RULES	Marama should achieve at a certain level by a certain period of time (as not meeting funding criteria for a special education need), thus implying Māhita and the school should make all efforts to ensure Marama meets these levels of academic achievement.
School Achievement targets	RULES	75% of the class should achieve at a certain level by a certain period of time as a given, thus if Marama does not, Marama requires extra support and intervention to ensure catching up or at the very least to prevent further falling behind peers. However, it could be that Marama has special education needs that mean that these targets are unattainable at the same times as peers and so requires more individualised learning.
Family’s viewpoint	COMMUNITY	Marama’s educational path will be different to others and Marama will fail at primary and possibly secondary/high school, but will do well at university so there is no reason to interfere with this trajectory as university is more important than primary school for finding work. Providing interventions will not help or be useful and may just make things more difficult for Marama.
Māhita’s planning for literacy activities	ARTEFACTS/ TOOLS	Children learn in a linear way (although students with ASD do not necessarily learn in a linear way) and need certain skills to build upon other skills. The class needs to learn literacy in a progressive manner. If Marama has not understood or mastered certain aspects, then later aspects cannot be learnt or understood. Therefore Marama needs to receive extra support and/or interventions to ensure Marama has these baseline skills.

Māhita presumed that children learn sequentially or linearly, which accords with the idea that students go up the levels of the curriculum in the New Zealand Curriculum in an orderly fashion (Ministry of Education, 2007). This is represented in the following illustration from a Ministry of Education website.

Figure 21 - Curriculum achievement objectives by level



<http://nzcurriculum.tki.org.nz/Related-links/Curriculum-achievement-objectives-by-level>

However, as explained on the same website, many children do follow this pattern and it is just a guideline. Research has indicated that children on the AS do not learn sequentially or linearly in many areas (Attwood, 2011; De Clerq, 2011; Peeters, 2011). Even though Māhita did not describe Marama as being able to achieve, conversational data suggested that Māhita seemed to believe that children should achieve academically. I interpreted these views as accepting of national standards that state that *all* children *should* be able to achieve the standards. All, however, is all those students who do not have ORRs/ORs funding, as ORRs/ORs students are

exempt. This view fits with the national education ideology currently driving national standards and the predominant Westernised value system of pakeha (non-Maori) Aotearoa/New Zealand that achievement is related to academic success (Flockton, 2010).

Through my observations and time spent working with Marama, I thought that the task of writing without being told what to write was conceptually just too difficult for Marama to attempt at that point in time. Marama would become stuck on what to write and so not start to write. Māhita thought that news should have been easier for Marama, but Marama did not feel that there was any ‘new stuff’ to write about.

Māhita: “Right everyone, now we’ve talked about our news, it’s time to write about it. When I give you your writing book you need to get started on your news. Don’t forget to put the date on the top. Marama, here is your book. Now go and sit down and write your news about the weekend.”

Māhita to Emma: “Why isn’t Marama doing anything? Honestly, we do this every day, all Marama has to do is just write one or two things that happened at the weekend. It has to be easier than writing a story, not that Marama does that but you know what I mean.”

Emma: “Perhaps Marama has got stuck on the idea that it has to be new, and maybe nothing new happened. Do you want me to go and work with Marama?”

Māhita: “Yes please.”

Māhita’s concerns about Marama’s inability to achieve the required level at the nominated time can be interpreted in this context as one of concern about not being able to provide any extra support that may have been useful and a worry that the principal may view Marama’s lack of achievement as being due to poor teaching. This idea has received validation in New Zealand

with the politicized national standards agenda suggesting that every student could achieve if they were taught effectively.

The standards agenda operates as if standards are absolute, and the legitimizing narrative operates as if those absolute standards can be made accessible to everyone...Such an agenda is cruel, as well as being manifestly nonsensical, since an average standard, by its nature requires half the population to fall below it, (Benjamin, 2002, p.47).

It is this narrative that Māhita was validating when becoming concerned about effectiveness in relation to achieving particular targets.

Māhita: “I know that Marama won’t achieve the level, even with all my time, but I have a whole group of borderline children too. Umm, I just don’t know if I should focus on trying to get them up to the level or keep teaching in the way I am now. Which children do I concentrate on? Everyone, in which case it won’t be enough to shift the borderlines, or the borderlines which means the ones who are at level now will not be extended? But I know I have to get as many children as possible to the level...”

In light of the standards agenda, “the social and political meanings still attached to ‘learning difficulties’ are overwhelmingly negative,” (Benjamin, 2002, p.55). Students who struggle to learn, or who learn differently, for example in a non-linear fashion are placed outside of the framework of successful students. This can therefore frame their teachers as not being successful in their teaching of these students.

Māhita gave voice to this when saying, “If you could teach Marama more, this would help. You seem to be able to get Marama to do things I just can’t. I don’t know how to get Marama on task, working and achieving.”

In this conversation Māhita was referring to a writing task. With 1:1 support, structured in a particular way, Marama would write one or even two sentences. However, unless this particular structured support was provided Marama would sit and seemingly stare into space and do no writing at all. I had previously explained the successful structure to Māhita, however Māhita felt that it was me and not the structure.

Emma: “Marama does write when you are providing 1:1, I saw this yesterday.”

Māhita: “Yes, but only when I indicated what to write and then where to find the words, to copy them. That’s not writing. The children should be able to write four or five sentences by themselves now.”

Emma: “Like many children on the spectrum, Marama doesn’t want to write things wrong. Marama can read well enough to know when the word is wrong, that’s why when you said find the word on the word wall, Marama could do that and then accurately remember the spelling during the walk back and write it out correctly once sitting down. Marama will not write if it involves guessing, in case it isn’t right. You helped Marama to get on task by framing the ideas into a sentence and then reminding Marama where to find the words in the classroom.”

Māhita: “Yes, but when you work with Marama, the result is more than one sentence. Look the rest of the class are writing more.”

In this exchange it can be seen that I was trying to reframe Māhita as a successful teacher, but that Māhita was caught up in the amount of writing presented and not the quality. The other students were indeed writing a lot more, but they were using the suggested method of writing of sounding out words they were not sure how to spell, and Marama would not do this, in case it was incorrect. Unfortunately, I was unable to shift Māhita’s perspective that Marama was not a successful student and that Māhita was unable to successfully teach Marama.

The New Zealand ASD guidelines (Ministries of Health & Education, 2008), suggest that students on the AS should be valued for being able to think outside the square and for the contribution that they can make to schools and society. This follows the social model of disability, which “recommends valuing the ‘difference’ that is inherent within autistic individuals, whilst also enabling them to develop strategies to help them manage a non-autistic and autistic-unfriendly world,” (Benjamin, 2002, p.127).

I would suggest that the national standards agenda and schools that have noisy classrooms are autistic-unfriendly, and that taken together these make it difficult for students on the AS to be taught and to learn strategies that might help them succeed as individuals. The standards agenda values homogeneity and thus makes it difficult to value diversity within the classroom, (Benjamin, 2002). For example, Māhita not valuing Marama’s ability to use a word bank when writing because the reluctance to write was the over-arching perception held. Māhita’s construction of Marama at this point was a student with very low writing ability.

Although some autistic-friendly modifications were in place at Canterbury Primary, students on the AS were allowed to wear headphones for example, this was only allowed in assembly and not in the classroom. This was due to the idea that students would not be able to hear their teacher if they had headphones on, and so would not learn, (personal conversation with deputy principal). However, I would suggest that students on the AS with noise sensitivity would not be able to learn in a noisy classroom environment unless they were allowed to wear headphones or the class was not allowed to be noisy. Interestingly since this research has finished, students are now allowed to wear headphones in their classrooms.

6.3 The role of feedback/verbal support in teacher choices

Teachers face a myriad of conflicting demands and it can be hard for them to know which ones are ‘the’ instructions or requests to follow and which ones will lead them to being seen as having poor judgement or being less effective in their teaching. This difficulty was compounded in instances where teachers worked in conjunction with outside specialists and/or management to support students. Sometimes the outside expert would concur with school policy and sometimes they would ask the teacher to implement a plan that contradicted school policies.

The teachers in this study wanted those outside experts to provide constructive feedback about their actions and the effects of those actions on the students. Without this feedback, teachers expressed frustration as they were unsure if some of the things they were doing were really effective for the students. This is in line with research that indicates that students learn best when provided with accurate and constructive feedback (Alton-Lee, 2003; Bevan-Brown, 2006).

Kaiako: “I wish people would give more feedback about what I am doing right. I usually know what is really bad, you know those times where you know you didn’t help the situation, but out of all the other things, the moments that I am not sure if they are average or really successful, it would be good to know which bits I should keep on doing.”

Kaiwhakaako: “I feel like we are in this alone, I’ve been told a lot what I’ve done wrong in the past, but even in a walk through the really good things just don’t seem to get celebrated.”

Ahorangi: “I rarely see any other adults in my class, so who would know how much of what I am doing is helpful or not. I appreciate it when we talk and you tell me why you think something was effective.”

Māhita: “These targets are really important, I need to get 75% of the children to meet this target, but how? I don’t know what to do, what do you think?”

In discussing with the teachers what they felt had really made a difference over the year to their effective teaching of the students on the AS, I had expected the response to be around their increased knowledge or practical teaching tips. However, they all said that they most appreciated the emotional support and that getting feedback from myself in particular, or others within the education system, about what they are doing that was really effective, meant that they could ‘do more of it’.

Māhita: “I really liked it when you said that something I had done, the way I had presented something or the way I spoke, something was really effective for Marama. It helped me to know what I could use again, put in my repertoire. It was nice to get that positive feedback. And you listened, you put up with moaning and just saying stuff and you always had something positive to say. That was really useful, it was quite stressful sometimes, and your comments helped to de-stress things.”

Kaiako: “You seemed to understand the emotional aspect of teaching students with behavioural challenges, that it can be tiring and draining. You’d point out how much things had improved when I wasn’t seeing it and how the things I had done, specific things had helped Tui to make this progress.”

Kaiwhakaako: “Just great having that pat on the back, that acknowledgement that I did something right, something out of the ordinary, that I helped kids to make progress. Having that positive input into the IEPs was good, it helped *the mums* see how much progress Hari and Paikea had really made, which took away some of that anxiety.”

Ahorangi: “This year was really hard work, you helped when you made comments about things that I was doing that worked really well for Iorangi or Ira. You stayed realistic about what could be achieved and that is so good. When ‘the experts’ swoop in from outside it’s usually all about what you are doing wrong and what you should be doing to make it right. Like that behaviour plan for Iorangi, it may have looked good on paper, but there was no way I could implement it. When you changed it and said all the things that I already did well could be used it was so much easier.”

These four teachers expressed views about the difficulties of teaching students on the AS effectively, with so little feedback about what was effective and what wasn’t, making it even harder to teach the whole class well. Ahorangi had the least outside support of all the teachers and had two students on the AS. For Ahorangi the need to balance the needs of self, class and the two students on the AS had been very difficult.

Kaiako: “Tui has so much potential, I need to help Tui learn the skills to manage self so that the learning can take place. When we talked about this you were happy for me to use strategies that had worked with similar kids in the past, you treated me like a professional. You listened and gave proper consideration to my ideas.”

Ahorangi: “Sometimes I just need some time to recharge my batteries, to have some space. When you took Iorangi and/or Ira off for half an hour or so, it just gave me a bit of time to be able to focus on the rest of the class and their needs. I have to admit I had a few stress days off this year, but it just seems to get harder and harder. And when I had that bad patch, you kept telling me it was ok to have a bad day, that all teachers have bad days now and then.”

Kaiwhakaako: “You listened to me rant about stuff and never made me feel bad. Actually, you were so positive about the things I did right that when things went to custard, I was happy to talk to you about it, knowing you wouldn’t think I was an awful teacher.”

Mahita: “It was good that you listened and acted like a sounding board, when I read back some of the quotes, I can’t believe I said some of those things, but it was so much hard work teaching Marama, so frustrating. But you kept coming back and asking what I thought, what I wanted. I really wanted you to take Marama and do one to one work all the time, but you wouldn’t do that. Still you always found good things to say and you never made me feel bad.”

I was surprised to find that teachers, though not actively seeking validation, found emotional support and professional validation both rejuvenating and professionally useful. This is a finding that I have helped me to ensure my professional work with teachers aims to be emotional supportive and helpful through the use of positive feedback. In this I aim to co-construct both the competence of the teacher and of their student.

6.4 Teacher choices and policy

Teacher choices that conflicted with policy observed were as small as changing the way something is taught to a class or single child from what is written on the class plan, and as big as planning and delivery bearing no resemblance to each other, or the use of a completely different behaviour management strategy. The five teachers involved in this research varied in the amount of non-policy compliant choices from broad and frequent to very little, but all the teachers, including myself, felt that they could justify what they were doing in terms of outcomes for the children. These justifications were all based on the teachers’ personal experiences and in some cases research around best practice research produced in Aotearoa/New Zealand.

Ahorangi felt that Ira was intelligent from the numerous conversations participated in, in small groups, as a class and with Ahorangi one on one. Ahorangi saw that Ira's on-paper achievements were minimal and felt that this would lead to Ira being labelled as stupid or a failure. Ahorangi felt that if this labelling of Ira as not intelligent happened; then as a school, a system and a teacher, they were all failing Ira. Ahorangi and I worked hard to get Ira a reader/writer (with partial success after many months of Ahorangi continuing to push for this) and even offered to pay for Ira to be assessed by an educational psychologist so that Ira would qualify for a reader/writer. Unfortunately, all that Ira got by the end of the year was *Dragon Naturally Speaking* – which Ira could not read well enough to train. However, Ahorangi continued to make choices that gave Ira activities that were meaningful and provided success, even though these were not written into class planning.

Ahorangi said this was “so that Ira's self-esteem doesn't get any worse. It was awful when Ira realised other children could read and write far more successfully, though Ira still says their ideas are better than everyone else's' ideas.”

Ahorangi also recognised that, not only did Ira need some time out from the class every now and then, but the class also seemed to benefit from time out from Ira occasionally. This was highlighted after one of Ira's family members was diagnosed with advanced cancer, and Ira expressed distress in a number of challenging ways. This need for time apart from a challenging child was echoed by both Māhita and Kaiako, although it was not accepted by senior management at all.

I brought up this idea with the principal from time to time and at occasional pastoral care meetings as I felt that when a teacher genuinely expressed a need for a break from a child, if meaningful activities could be provided for that child somewhere else in the school then it

benefits the teacher, the child who is involved in meaningful activities with someone who is positive towards them, and the rest of the class, who get some undivided attention from the teacher (Goodall, 2011b).

For example, Iorangi wanted to make friends but couldn't work out how, or how to sustain friendships. Ahorangi found as a result of this, every couple of weeks Iorangi's immature behaviour would ramp up and start to grate, and that the class tolerance would dramatically drop. If, at this point, Iorangi had a half hour chat about life, things that were going on, how to manage this and what would be a better thing to try doing for a particular desired result, Iorangi's behaviour would improve for a while. In theory this was part of Ahorangi's job, but in reality Ahorangi was not able to do this.

Ahorangi: "Sometimes the rest of the class just need a break, and then sometimes I really just need a few moments to breathe. I can't give Iorangi that half hour one to one when they are most needing it. I rely on you being there and taking the initiative. I've really appreciated it when you've take Iorangi out for a chat about how things could be responded to in different ways."

Ahorangi's delegation of this aspect of managing Iorangi to me or other adults was in conflict with school policy which did not plan for students to just hang out with a spare adult and chat. However, Iorangi's behaviour always improved for a while after these chats and both Ahorangi and I gained some interesting insights into Iorangi's personality, anxieties and wishes. For example, Iorangi had not yet realised that particular skills were needed to interact with others in a way that would encourage them to want to hang out and spend time together, either in a class group while working or socially in the playground. Iorangi and Iorangi's father both have Aspergers. Iorangi's father is extremely intelligent, successfully employed and married with

two children; however, his social skills are noticeably different to most neuro-typical adults and he had discussed how difficult he found it to help Iorangi to develop social skills.

National school and rules/regulations/ guidelines and community expectations/views; whether at a staff, school or wider community level were mediated by each other and the division of labour/effort. A teacher who was using strategies that conflicted with school processes was unwilling to do things not covered by national guidelines and vice versa. Some teachers in this research chose to use strategies outside of school guidelines and policies because they felt that they clashed with wider community, especially whanau/family views and expectations.

For example, Hari's mother wished to prioritise Hari's spoken language skills and interpersonal development over anything else, which did not fit with the school policies regarding curriculum delivery for Hari's year grouping. Hari's teacher, Kaiwhakaako, decided to ignore those school policies in order to follow the priorities promoted by Hari's mother.

In this case the IEP team all agreed on these goals as steps which were important for Hari in order to ensure the success of Hari's continued inclusion in the classroom. This was the first year that Hari completed without any days of school refusal. Previously part way through the year, Hari would refuse to go to school for several weeks at a time. Hari would always communicate to mum that school resulted in unhappiness during this time. Hari's mother felt that this was due to Hari's lack of positive communication with peers and others within the school and that Hari would be happier if the development of these skills was facilitated.

When teachers act in ways that are in conflict with policy, it could be viewed as problematic or proactive, as showing leadership rather than following rules (Hargreaves & Fullan, 1998).

Often when it is not seen as problematic it is seen as a pragmatic response, as with Ahorangi not testing Ira using the regular testing regime. When it is seen as problematic it is often viewed by senior management as not doing what teachers are supposed to do, as with Kaiako not implementing the school behaviour policy with Tui. Rarely are teaching choices seen as problematic when they seem to be resulting in effective learning outcomes for the students.

However, at a school level, schools such as Canterbury Primary, that chose not to implement national standards because they felt they would negatively affect their students, are now being told that this is illegal and not going to be tolerated. Canterbury Primary currently (2013) implements the national standards policy.

Willingness and desire to meet the needs of students who are perceived to be able to make progress seem to be the driving factors in many choices teachers make. Observations of teachers illustrated that teachers do things that when questioned, they explain in terms of meeting the needs of the students. Table 23 illustrates some of these subversive actions and the teacher rationale.

Table 23 - Subversive actions and their rationale

Action	Correct action if teacher followed school or national rules	Teacher rationale
Tui having time out in the classroom instead of outside the classroom.	Tui being taken to the deputy principal's (DP) office for time out.	Tui likes spending time with the DP, therefore it is not going to modify Tui's behaviour to send Tui to the DP.
Iorangi spending time 'hanging out' with Emma (myself)	Iorangi being in class at all times.	Iorangi needs a break from the class from time to time and they from Iorangi. When Iorangi hangs out with Emma, Iorangi's behaviour improves for a few days or up to a few weeks.
Paikea learning to throw and catch a ball during literacy time	Paikea sitting at table turning the pages of books.	Paikea does not read books during literacy time, sometimes Paikea will flick pages over and sometimes stare into space. Unless someone is there to share the book with, Paikea does not read. Paikea is socially isolated and wants to play ball games but does not have the skill, if the teacher aide uses this time to teach Paikea, Paikea will be able to play with others and hopefully become less socially isolated.
Ira drawing and labelling maps during story writing.	Ira will read stories when the class is reading stories.	Ira gets very anxious and angry if requested to write stories, firstly due to difficulty forming letters and words and secondly due to a difficulty deciding what to write. Ira's special interest is maps. If Ira draws and labels maps, Ira is getting vital reading and writing practice in a non-threatening way. Ira is able to broaden and deepen geographical knowledge by being asked to draw different countries and label different aspects of maps.

As shown in the table above, these teachers' actions all led to effective teaching of their students on the AS, and all had at least one element in conflict with school or national policies. This illustrates that the drive to help children develop to their full potential and the ability to see that students on the AS have potential were factors that influenced teacher choices.

Ahorangi: "Ira has all this amazing information, inside but struggles to get it onto paper. Yes it is important to help Ira learn the skills to get information from inside onto paper, but it is more important to let Ira know that we know how much information is being held

in that fantastic brain! It doesn't matter how this is presented, it is just so important that everyone can see Ira's potential. That's why I make sure Ira has opportunities to feedback using drawings or talking to me, instead of doing written assessments."

Kaiwhakaako: "Paikea is so fantastic with animals, I can just imagine Paikea working with animals, taking care of them, earning a living. Yes school may be hard and some things may be out of reach, but at the end of the day Paikea should be able to have a good life and do something that brings a lot of happiness. At the moment friends and wanting friends is the most important thing for Paikea, so I think really that should be our focus, even if other things have to be missed out. I think there is time to do those things, once Paikea has a sense of being accepted and valued."

In summary, on the whole, the teachers were happy working at Canterbury Primary, but they still exercised personal and professional judgements to choose to teach in ways that conflicted with policies. Additionally, the teachers had moments of unease or nostalgia for how they perceived things have changed in teaching.

Kaiwhakaako: "Sometimes when I really disagree with some things I think that I could just get a new job, but I have family ties to this area, so I can't move even if I did want a change. I have a permanent job here and I'd only apply for another permanent position. I have to be able to plan to pay the mortgage and with a fixed term position you don't have that long term job security."

Ahorangi: "At the end of the day, I have some freedom to choose what I teach and how, and that's enough. I'd like to be able to go with those magic teachable moments but I think those days are gone for good."

Māhita: "National standards are going to change New Zealand primary schools more than people think. Once every school is doing them, the school day will change dramatically. Look what happened in the UK with the literacy hour and numeracy hour every day, and

the exact topics in history etc being prescribed in great detail. By the time you add in breaks, lunch, assembly etc there was hardly any time to teach in the moment, to teach that thing that the children want to learn, that they brought up with questions and discussions.”

Kaiako: “I don’t mind the curriculum content being given to us, but I think it needs to be more holistic. Academic results in themselves are not enough for kids to grow into happy, healthy adults who will be of benefit to society.”

Kaiako’s comment reflected a message spoken by all the teachers in this research repeatedly over the year. All the teachers felt that school was about more than just learning to read, write, do arithmetic and learn other academic subjects. The AAT framework analysis supported my initial idea that where Kaiwhakaako, Kaiako and Ahorangi made choices that did not meet school or national policy requirements; they felt they were doing this to meet perceived needs of students.

These teachers appeared to value different layers of learning to those layers they perceived were valued by the national assessment and standards framework. This is possibly due to their desire to recognise and value these students’ learning and their ‘learning to learn’ as “a legitimate, practicable and useful educational objective” (Claxton, 2002, p 22).

The teachers evaluated the mediating factors within their complex context through filters of expectations for students and their futures. Teachers who saw potential worked to facilitate that potential, even if it required making difficult choices. Teachers who did not see more than very limited potential for their student found it much more difficult to see themselves as effective teachers for that student and this affected their teaching (Morton, 2011) and their resolution of the mediating factors in their context, as for example Māhita’s desire for me to teach Marama.

In the final chapter, conclusions and discussions, I will investigate the wider questions and implications for the teaching of students on the AS raised by this AAT analysis of the data collected. I will also explore some of the limitations of this thesis and introduce some avenues for further research.

7. Chapter 7 - Discussion and Conclusion

This research was initiated by my observations that some teachers were less willing or less able to facilitate engagement in learning for students on the AS than others. I wanted to know why this was. My search for the why was grounded in my constructivist belief that people have different concepts of knowledge/truth because of their differing understandings of the world. For example, on a basic level, a noise for example, can be perceived as both loud and quiet by two people standing next to each other at the same moment in time. On a more complex level, the competence of a student is taken to be at a certain level by one teacher and a completely different level by another, and yet another by a parent of that student.

My own experiences growing up in various parts of the world taught me that we do not all understand and interpret experiences in the same way. Through my engagement as a researcher on this project, I came to understand that interpretation and re-interpretation are on-going processes. Having lived in three different continents by age 8, I took it as a given that people had different views because they have different socio-cultural experiences and contexts within which they construct their views (Burr, 1995). Constructivism highlights the unique experience of each individual, as they create meanings through an active process of engagement with the world. Whilst collecting and analysing the data to tease out the teachers' constructions of the AS and how they engaged with contradictory contextual influences, I developed a greater awareness of the continual process of meaning making as self interacts with others and with evolving contextual factors.

Airasian & Walsh, (1997) suggest that knowledge is tentative, subjective, and personal and as such can be reconstructed or consolidated over time and in relation to the context. My aim in this project was to analyse the data to first, tease out the teachers' constructions of the AS and second to understand how the teachers engaged with contradictory contextual influences. To

understand the contextual affordances and constraints for the teaching of students on the AS, data was collected via observations and conversations.

Classroom observations utilised my strengths in noticing and recording details, whilst attempting to capture as much of the complex context as possible in order to analyse social (co-)constructions as they were evolving (Crotty, 1998). Follow up conversations about teacher constructions of their students on the AS, what teacher perspectives and values were and how these interacted with the cultural context of school, community and national education policy utilised active listening techniques. These techniques aimed to ensure accurate noting of teacher thoughts and interpretations of their actions/inactions.

Expressed teacher beliefs were valued because they provided teacher perspective (Ratner, 2005). Where our opinions differed I hoped to develop co-constructions that would lead to the viewing of the students on the AS as learners with potential. However, my initial interpretations were challenged as my awareness of teacher voice and the impact of contextual factors on teacher actions.

Teaching is an activity that is situated in a complex context involving the interaction of the teacher with the contradictory demands of the educational context. Activity theory addressed the need to study individuals within their complex contexts in order to gain an understanding of their actions (Daniels & Cole, 2002). I was able to use social constructivism alongside activity theory as a philosophical lens through which to analyse how the teachers socially constructed their views and opinions within the complex contexts in which they worked as both are philosophies focused on the socio- cultural context (Jonassen & Rohrer-Murphy, 1999).

Activity theory's stress on the multiple mediators of a complex context (Engeström, 1999) guided me to keep looking and listening, to develop a deeper and richer picture of the internal and external contexts of each teacher and from there to analyse through co-constructing conversations and cross referencing of key contextual factors. Being autistic I enjoy the myriad

details within the big picture. Adapted activity theory (AAT) tables were used to arrange detailed data collected in a manner that facilitated my analysis of effect of contextual factors, observed effects of contextual factors and then to analyse these tables to elicit findings.

Engeström, (1999) suggests contradictions in activity manifest themselves through large or even small unremarkable changes in practitioners' everyday work actions and that the challenge is to uncover these changes and analyse them. Within this research, I observed and heard contradictions and small changes related to 1:1 time spent with AS students, effort to communicate effectively, modifying tasks, interactions with parents and individual education plan (IEP) contributions. Changes in teacher practices were mediated by contextual details of time/energy/external assessment regimes/prior constructions of the AS and/or inter-personal interactions (or lack of).

Additionally, my views on teaching of AS students became more nuanced as co-constructions of contextual influences developed. I reconstructed my own ideas in relation to deficit theorising of teachers, so that my circle of collaboration was shifted to include the teachers, rather than just the students. I came to understand (know) myself with more clarity and to understand the importance of interaction between internal and external contexts (person and world) for myself, the teachers and the students.

The ways in which teachers responded to internal and external contextual mediators was found to directly affect the amount of personalised interactions and curriculum adaptation that the teachers put into practice for their students on the AS. The data did not support the idea that increasing teacher knowledge and skills around students on the AS improves teacher effectiveness for these students. Rather I observed evidence that knowledge of the AS is not the same as understanding the AS (De Clerq, 2011 & Peeters, 2011). The distinctions between 'knowledge of' and 'understanding of' came to be of critical importance to this thesis.

This study drew on constructivist understandings of learning and constructing meaning. Using constructivism I was able to gain insights into teachers' and my own understandings of the contextual mediators involved in teaching and supporting the teaching of students on the AS. An understanding of autism, a willingness to try and meet the needs of the individual students, teacher ethics/values about the inherent value of all students, including teacher belief in the difference and potential of students and a willingness to facilitate the development of this potential were all key factors involved in teachers effectively meeting the needs of students on the AS. Low levels of understanding of the AS seemed to lead to deficit framing of the students and higher levels of understanding to the construction of these students as individuals, with their own range of skills and areas of difficulty.

This chapter summarizes the key findings and then discusses their relationships to one another along with possible implications of these findings and ideas for future research. However, in researching which contextual factors influence teacher actions in relation to teaching students on the AS, this research raised many more questions than it answered. The adapted activity theory framework (AAT) tables revealed several key factors that observably influenced teacher choices. Some of these factors afforded or constrained the goal of effective teaching of students on the AS, while others were not clear cut, varying between teachers as well as within teachers, depending upon the mediating factors of other contextual elements.

The ways in which teachers responded to internal and external contextual mediators was found to directly affected the amount of personalised interactions and curriculum adaptation that the teachers put into practice for their students on the AS. Through conversations it became apparent that at times this was subconscious and at other times it was a conscious action on the part of the teacher.

As mentioned in Chapter Two, teaching and learning are profoundly affected by the context, the “ways in which educational institutions are governed,” (Burnett, 2003, p2), with governance representing community and rules in the AAT framework. This research found that attention paid to rules, in particular rules in relation to literacy assessment and behaviour policies were crucial factors affecting teachers’ choices that directly impacted their students on the AS. However, analysis of the data gathered revealed that the key factors involved in teachers effectively meeting the needs of students on the AS were an understanding of autism, a willingness to try and meet the needs of the individual students, teacher ethics/values about the inherent value of all students, including teacher belief in the difference and potential of students and a willingness to facilitate the development of this potential.

7.1 *Effective teaching affordances and constraints presented by Rules*

Educational rules and guidelines are provided to schools by the Ministry of Education. These may be further added to or modified by schools as they pass on rules and guidelines to individual teachers. There are a myriad of rules under which teachers work. As suggested in Chapter Six, this data demonstrated that these norms could influence teachers’ actions and choices (Zeichner et al, 1987). The teaching context has a number of rules within which teachers are expected to work, such as the use of the national curriculum and school policies. I found three rules exerted the most influence on these teachers, whether affording or constraining their teaching of their students on the AS.

The three rules that were found to impact on the effective teaching of these students on the AS will be discussed in this section: 1. the school policy to provide additional support for students progressing significantly slower than their peers, 2. the imposed assessment regimes and 3. the school behaviour policy. 1 and 2 will be further discussed in sections 7.1.1 and 7.1.2. At times, the teachers expressed strong clashes of viewpoint between themselves and the school, or their community and the ‘rules’.

One of the families/whanau, Marama’s, expressed beliefs that were not in line with the school policy on additional support. As presented in Chapter Five, they did not perceive that Marama was less able than peers or that struggle to progress meant anything in particular, or that it needed to be responded to with extra support or an adapted curriculum. This could be understood as their framing of education through the lens of autism as a cultural difference, rather than using a deficit model (Happé, 1999). Marama’s father clearly explained, to myself and to Māhita, that he has most of the same characteristics that were demonstrated by Marama, and which had led to school failure. However, the strengths of some of the traits of autism like focus and repetition had led to success at university and in the job market. Evans (2012) suggests in order to create more opportunities for autistic adults and children that the autistic community needs to engage others in narrative that demonstrate a range of autistic adults living strong, successful lives. Because Māhita had no experience of this narrative of the possibility of success for adults on the AS it was hard for Māhita as Marama’s teacher, to accept and value Marama’s father’s comments.

Marama’s father said, “I don’t want Marama to get any extra help or support, I don’t see any problems in the future, I was just like this at school and I didn’t get anywhere until university.”

Māhita discussed this issue with me later, saying, “It goes against all my instincts as a teacher to do the best I can for all the students, to not do something extra. Plus policy requires me to put in place extra support.”

This tension between family/whanau and school policies can be compared to the experiences of Maori students, feeling culturally separate from the school, as identified in Chapter Two (Ministry of Education, 2002). Bevan-Brown (2006) reports cultural inclusion is not happening, not because schools and teachers don’t want to, but because they are not sure how to do this and may not understand the underlying concepts. I would suggest that Māhita did not understand the concept of autism as difference with a skill set that can be well matched to many careers (Grandin, 2011).

The tension between teachers’ internal beliefs and values, the values of the family/whanau, the school and the wider educational community may be minimal or it may raise issues as in the case of Māhita and Marama’s family/whanau. In this case the school management advised Māhita to formally record the conversations and abide by the wishes of the family/whanau for the time being. How this translated into the classroom was not discussed and Māhita continued to struggle with the conflict between a strongly held personal belief that “you support students who are falling behind with extra input or an adapted curriculum” and the family/whanau requirement to not provide “anything different” for Marama.

I found that Māhita’s teaching of Marama should have been afforded by the school policy requiring extra support for students who were not achieving at the same level as their peers. However, Māhita perceived the family/whanau request not to provide extra support to be constraining to the effective teaching of Marama. A possible explanation for this was that Māhita felt it was not possible for Marama to learn without one to one teaching, if indeed it was

possible at all. Māhita's explanation for this construction was that Marama had made little or no discernible progress over the school year. Māhita maintained this medical model deficit viewpoint (Happe, 1999), even when I provided concrete examples of progress.

In contrast, the other teachers' constructions of their students on the AS were less deficit focused. This enabled the teachers to identify and plan for the academic and social-emotional progress of these students. It is possible that if autism was viewed as a cultural way of thinking, living and being (De Clerc 2011), giftedness within autism would be able to be recognised, possibly identified and interpreted using a framework similar to Bevan-Brown's (2009) gifted and talented model for Maori. This new way of thinking about students on the AS could facilitate the development of a learning environment that broadened and deepened knowledge through the special interest gateway (Bowen & Plimley, 2008) as discussed in Chapter Three. The Tips for Autism (Ministry of Education, 2008) programme recommends that teachers use the student on the AS's special interest in this way, whether or not the student is perceived as gifted or talented in relation to that special interest. If this is done, it could eliminate some of the tensions between the way students on the AS prefer to learn and their learning environments they were experiencing during parts of this year. Although the national curriculum specifically notes that curriculum design "involves making decisions about how to give effect to the national curriculum in ways that best address the particular needs, interests, and circumstances of the school's students and community" (Ministry of Education, 2007, p.37) this was not always taken into account by these teachers.

It may be that although these teachers did all express views that indicated they had a focus on raising student achievement "the complexity of educational practice, and competing demands from many sources, can obscure the goal of student achievement," (Alton-Lee, 2003, p.26).

Kaiwhakaako chose to adapt tasks for Paikea so that the content was normally focused on animals, as this usually improved engagement for Paikea with given tasks. In contrast, Māhita focused on the competing demands of achievement targets for the class as a whole and the goal of supporting Marama was obscured.

7.1.1 Mediating factors for effective teaching presented by the school teaching and planning policies

As discussed in Chapter Six, I found that teachers' interactions with the school policies led to a variety of teaching choices being made by these teachers. School teaching and planning policies were interpreted differently by each teacher and led to different outcomes. For example, Māhita prioritised literacy and numeracy in accordance with school policy, whereas Kaiwhakaako talked about the way different aspects of education were prioritised by the school as being one of the main constraints to ensuring the students could develop to their full potential.

Kaiwhakaako: "Education should be about reaching your potential while learning to live peacefully and respectfully amongst others. We should be stressing how to take care of each other and the environment. All this other curriculum stuff is important, but it's more important to learn life skills to get you through life safely and successfully."

I found that teaching and planning policies could both afford and constrain the teachers. As illustrated above Kaiwhakaako found the policies constraining because they were not in accordance with personal beliefs and constructions of the meaning of education. Māhita, on the other hand found the literacy and numeracy policies afforded "quality teaching, children need a solid literacy and numeracy base".

The data did not support this as an affordance to Māhita's teaching of literacy and numeracy skills to Marama. In discussion with Māhita it became clear that although the school planning and teaching policy were constructed as supporting the effective teaching of the whole class, the assessment policy was not. Māhita perceived the assessment policy as constraining the type of literacy and numeracy teaching for individuals, "like Marama, who aren't going to achieve the standard."

The interaction of Māhita with the combination of policies resulted in effective teaching of Marama being both afforded and constrained. In this research, the assessment policy was more influential on Māhita than the planning and teaching policies.

7.1.2 Imposed assessment regimes and effective teaching

For the purposes of this analysis, imposed assessment regimes were defined as evaluations and assessments required to be carried out using a formal data-gathering approach (Ministry of Education, 2000). Most of these imposed assessment regimes were class-based and carried out by the class teacher, in the form of tests or formalized interactions, although some were carried out by teacher aides. Assessments are used to label students; what they are able/not able to achieve, what they should do next in order to make progress, what group they will be placed in for maths or for example identifying and providing for gifted students (Bevan-Brown, 2009).

Assessment was at the heart of planning and teaching for these teachers, who used a number of formal and proscribed literacy and numeracy assessments. An immediate tension was faced by teachers where students performed in these assessments in ways that did not accurately demonstrate the scope of their abilities, which is the case for many students on the AS (De Clerq, 2011; Peeters, 2011), including most of the students in this research. The Mathematics curriculum and assessment protocol as used within Canterbury Primary was particularly prescriptive in the order in which students were measured as acquiring skills and knowledge (Ministry of Education, 2007). However, Māhita and Kaiako were the only teachers in this study who taught these students maths, so I did not obtain data from Kaiwhakaako and Ahorangi in relation to the teaching of maths. In the senior school maths was taught through interchange and these students were all placed in either the ORs maths group, taught by a teacher aide, or the lowest level group, taught by the deputy principal.

Within reading, the assessment process resulted in Paikea, Hari, and Marama being given books to read at a level that was consistent with their perceived ability to answer comprehension questions, rather than their ability to decode text. This is problematic as the ability to answer verbal questions orally was very difficult for these three students. I think that the lack of accurate verbal responses, may not demonstrate a lack of knowledge, rather that the student could not express the answer, at that moment in time, in the manner required. The data supported Baggs' (2012) suggestion that people who are not autistic do not understand speaking can be difficult for people on the autistic spectrum even when they know what they want to communicate. This can make it difficult for teachers to assess what students know and plan relevant learning activities for them.

This is wider issue than just students on the AS. Alton-Lee (2003) notes that historically teachers in New/Zealand/Aotearoa have carried out inappropriate assessments on Maori students and held inappropriately low expectations for these students. This means that where 'next steps' are prescribed by someone who does not know that student's style of being and doing very well; those steps may well be inappropriate (De Clerq, 2011). Alton-Lee (2003) also stresses that for assessment to increase quality teaching it requires the use of effective and formative feedback for students, whilst looking at the context of the learner as well as the curriculum knowledge being targeted. I would suggest the formal school wide assessments used by some of these teachers, such as the PROBE reading tests, were inappropriate and fed into inappropriately low expectations.

Observational data showed very little engagement during class silent reading for all the students except Marama, who did not want to stop reading at the end of reading time. In separate discussions with Kaiako and Kaiwhakaako it became clear that their conceptualisations of their

students on the AS as readers were based on the formal reading assessments, which indicated very low levels of comprehension. Unfortunately, when any of these students were assessed formally, they were removed to another space in the school that they rarely visited, which is less than optimal for students on the AS, who can find change anxiety provoking (Attwood, 2011). The books chosen to read are specified in the assessment and sessions observed did not use books that were focused on the students' special interests, which created difficulties for the adults to engage with the students. Additionally, the teachers did not modify the language used in the questions when administering the test, even though the receptive and expressive language of these students was impaired. Paikea was frequently observed engaging with books in the library when given free choice over what to read or look at, whereas in class there was minimal engagement with the pre-selected books available to read. This would indicate that it is possible assessment protocols can act as constraints on effective teaching of some students. In contrast, Ahorangi chose not to utilise formal testing with Ira, stating that, "there is no point, it is completely inappropriate and won't tell me or anyone else anything useful about Ira."

One of the findings of this research was that where and when teachers in this research prioritised personal learning and engagement over school wide planning, teaching and assessment policies, students on the AS seemed to be more engaged and active in their learning than at other times. This was evidenced in Marama's reading, which was self-selected, which resulted in a high level of engagement and active reading. Other students in Marama's class were required to choose from a set of pre-selected books that were all at the level of their PROBE assessment. When Marama had been asked to choose in this way, the pages of the books were rapidly flicked through backwards and forwards until the next class task.

A constructivist approach to mainstream education implies that “learning processes are more effective and successful when the instructional approaches and content are geared towards individual learners,” (Kinshuk, 2012, pp561-2) and that assessment processes need to be similarly individualized. Alton-Lee (2003) stresses that effective literacy interventions occur when teachers gather accurate data and respond to the individual student’s needs and strengths.

Accurate assessment data for students with communication difficulties can be very difficult to obtain, due to the language based nature of most assessments. The data from this research suggests that formal, structured assessments may not be able to capture the individual’s needs and strengths and that when these type of assessments are relied upon for planning and teaching, the resultant teaching may not be as effective or engaging as it could be.

As discussed in the findings, Ira and Iorangi demonstrated variability in engagement most clearly, going from being deeply absorbed in tasks within their skill or special interest area, to minimal or no engagement at all during most subject specific tasks like literacy and numeracy. During observations when disengaged, Ira spent large amounts of time wandering around the classroom or even leaving the room. Iorangi would hit people on the arm or head more frequently when not focused on a task, creating safety issues for the class as well as disrupting other’s learning.

It is likely that people on the AS can and do achieve most when able to work within their interest and skill set (Grandin, 2002 & 2011). Hari and Paikea both had the same special interest, animals, and when Kaiwhakaako used this to frame academic tasks both students were engaged for a much higher percentage of time than when the tasks did not involve animals. As

previously discussed, Marama had no known interests and was observed to be disengaged most of the time, although participation in numeracy was noticeably more than in other activities.

Aggregate results from class-based imposed assessments were not just used for planning class teaching but they were also used to assign financial resources or decide who could access support or extension programmes within Canterbury Primary (Personal conversations with school SENCO & Principal, 2010). Morton, 2011 discusses that role of assessment of the individual child with additional learning needs as being to enable access to, or retention of resources that support the school and the implications for how students are viewed by teachers.

Kaiako: “Tui is not going to be allowed to do reading recovery because their reading level is too low. *The SENCO* said that there is no point as Tui is unlikely to improve as much as someone else who is on the waiting list for reading recovery, and also Tui has already had huge amounts of money via all the teacher aide time that has been used for the oral language support.”

I would suggest that following on from the conversation between the SENCO and Kaiako, there was a co-construction of Tui as a student who was unlikely to learn to read at the level of their peers, and that this co-construction was used to justify the decision not to facilitate access to reading recovery. Prior to this Kaiako and I had talked on several occasions about Tui’s progress within other areas and had co-constructed an idea of Tui as a student with many struggles but an ability to progress. However, using the standard formal assessment procedure, Tui’s reading level was not perceived to be improving, which influenced a new co-construction of Tui as a student unlikely to benefit from any extra reading support.

Māhita’s main influencing factor was also assessment based. Māhita’s teaching in the second half of the year focused on the need for 75% of the class to attain specific literacy and

numeracy targets. As previously stated, over 25% of Māhita's class struggled with literacy and numeracy and were unlikely to meet the school achievement targets. Until given this assessment target, Māhita provided a varied approach to teaching and learning, ensuing that most of the class were engaged most of the time. However, after much soul searching – of which I was privy to some, Māhita changed the focus of teaching to maximise the chances of the students most likely to achieve the standards. Māhita though not teaching to the test, was instead focusing on specific children, so that they were more likely to achieve the school achievement targets.

Māhita: “It would be really good if you could do some more work one on one with Marama. I don't have time because I am trying really hard to get *that* group up to the literacy target. I'm sure with some intensive small group work they will make it, whereas Marama is so far behind this group, it wasn't possible for them to join in.”

Emma: “I'll try but I'm only here once a week, what is Marama doing during literacy the rest of the time?”

Māhita: “Well, I suppose just the can dos, I mean I do ask Marama to do the must dos, but these are the bit that they really need one to one support with and I just can't fit it in right now.”

Māhita interpreted the explicit message being given by the school – get 75% of the children to achieve the target, as the class priority and had a construction of Marama indicating Marama would not achieve the target within the given time frame. National standards state that 100% of non-ORRs funded students must achieve the targets. These messages can be interpreted socially /culturally in a number of ways and can influence teacher willingness to go ‘the extra mile’ for children who need that extra input/support. In this case Māhita's focus was on trying to ensure the borderline students reached the target. This construction of literacy and numeracy

teaching observably constrained the effective teaching of Marama, who was seen as not being able to improve sufficiently in the given time.

The assessment regime did not demonstrate Marama's writing abilities because of Marama's unwillingness to write any word that could be incorrect. In order to write, Marama required a word bank, which was not available for use during formal writing assessments. As a result, Marama consistently appeared to be writing at the lowest measurable levels. The data suggested that lack of access to tools acted as a constraint on Māhita to the introduction of more sophisticated vocabulary and use of more complex non-fiction texts with Marama.

The data found that my idea that willingness was linked to effective teaching was complex and influenced by other contextual factors. For example, although Māhita expressed the desire to meet Marama's needs initially in conversations, Māhita's conversations also demonstrated an association of students on the AS with difficult behaviour, which in Marama's case was labelled "passive-aggressive" and a drain on teacher time. The interaction of willingness, the assessment policies and Māhita's view of Marama as passive-aggressive resulted in a decrease in both willingness and effectiveness. As discussed in Chapters Five and Six, and illustrated in the previous conversational extract, Māhita's concern that 75% of the class could meet the school achievement targets (the percentage required by the school) led to a lack of personal willingness to spend 1:1 time with Marama. Instead time was spent focusing on the teaching of the majority of students to ensure as many as possible met the achievement targets. This led to less effective teaching of Marama.

Māhita understood this and wrestled repeatedly with what to prioritise. It is possible that Marama's very slow progress and poor interpersonal skills influenced Māhita's decision to

focus on the achievement targets, or that Māhita finally decided to follow family/whanau wishes and provide no extra support. However, additional support for Marama was available from time to time from a teacher aide and myself and it is possible that if these had not been provided, or provided more consistently, then Māhita might have prioritised things differently.

Following on from this conversation with Māhita, I faced a difficult choice. Knowing that Marama was not receiving an explicit literacy instruction during literacy hour, if I was present did I have an ethical duty as researcher to just observe and then discuss, or an ethical duty as colleague to provide assistance and work with Marama? I chose to visit when I knew the class were not engaged in literacy so that I was not forced to make this choice, although I did get this wrong on one occasion and chose to work with Marama.

The choices a teacher needs to make each day are phenomenal: how to teach, exactly what to teach, how to interact, exactly what to say, which behaviours to challenge and which to ignore, whether to let the students go in the direction they want to with their learning or to rein them in so as to continue with the preset learning goal for the task. It is likely that a teacher will make some decisions on autopilot and others will be prefaced by considerable thought. Either way, teaching can be interpreted as being about managing and responding to tensions (Lampert, 1985).

The effect of standards and imposed assessment regimes is interesting. Logically speaking, someone who has learning difficulties just above the cut-off point for ORs funding will struggle to achieve at the same level as a gifted peer in the same time frame. However, national standards make no allowances for this or any other difficulty with learning such as having few

English language skills, or having mental health difficulties that interfere with school attendance or participation (Flockton, 2010).

As discussed Canterbury Primary seemed to recognise the diversity of their students and so set a target of 75%, taking into account the approximately 25% of pupils they perceived to have learning difficulties. However the distribution of learning difficulties was not necessarily equal across classes or even year groups, so for some teachers ensuring 75% of their class achieved the targets would be far easier than for some other teachers. This knowledge can and did affect different teachers differently. For example Kaiwhakaako couldn't have cared less, already feeling that "I'm not viewed as a 'good teacher' by management. I don't really care, my kids are more important and it's been a hard year for them this year, with the earthquakes, death and kids leaving." Whereas Māhita became very concerned about the possibility of "looking bad compared to other teachers, because my class are more difficult and I've got more low functioning children." This sort of emotional pressure can and did have a significant effect on Māhita's willingness to differentiate the curriculum for Marama and spend extra time with Marama on aspects that needed more support, as it was unlikely that Marama would reach those targets within eighteen months, let alone six.

Ahorangi felt pressured by different external influences, as presented in Chapter Six, which were the potential perceived opinions of next year's teacher towards the class. Ahorangi was more worried that the next teacher would judge the students, than of being judged personally. Ahorangi often verbalised a firm belief in the equal value and inherent worth of each and every child in the class. Ahorangi judged self and the teaching being done by self, all the time, constantly trying to do better, until becoming overwhelmed at times. Ahorangi's energy and passion were easily reignited by a few true and honest comments about the successes being

facilitated for the students (Goodall, 2011a). As Ahorangi did not apply the assessment policy to Ira and Iorangi, the planning and teaching of these students was based on a cycle of plan, teach, evaluate with the student, plan next steps and so on. In this it could be seen that Ahorangi was co-constructing the students as learners who could both learn and evaluate themselves. It would seem that in working collaboratively with the students on the AS to assess their learning Ahorangi was afforded a greater effectiveness in teaching those students, than Māhita who was relying on the school assessment policies.

Looking at the 75% school achievement targets and the national standards (within which some ORs students can be exempted), these can be viewed as

- a) realistic – some children will never achieve academic targets at the same time as their peers

and/or

- b) deficit model-based – some children will never achieve these academic goals in a timely manner so we/society won't bother about them, we won't include them in our targets that are called national standards for ALL students, and in doing this 'we' set them apart, as other, as less than.

The implications of the constraints on effective teaching of proscribed assessment policy can also be seen in the UK and the USA. Benjamin (2002) and Slee (2011) identified that the UK's national standards increased barriers to learning for non-typical students. The American 'No Child Left Behind' Act (NCLB) means that states that fail to meet benchmarks are penalized often through a reduction in federal education funding. In 2010, Downey reported that an evaluation of the NCLB had strong evidence that achievement in Mathematics had improved for *younger* students, but the NCLB law had no impact on achievement in reading.

The national standards introduced in New Zealand are theoretically designed to ensure all children improve their numeracy and literacy skills. However these standards are, like the NCLB and UK national standards, expecting all students to be 'proficient' only in specific academic topics/skills, which can be contrasted with the Ministry of Education's own statistics that educational achievement has been increasing steadily over the 2003-2008 period.

Whether it is possible for 100% of students to ever achieve the standard is questionable (Flockton, 2010). 1% of students nationally meet funding criteria that specifically state they cannot perform at the level of their peers, and another approximately 9% have a disability, with at least 30% of those being intellectually disabled. Having a mild to moderate intellectual disability (ID) does not make you eligible for funding, but does mean your cognitive abilities are lower than most of your peers. This implies that a student with ID is unlikely to achieve the same standards as other students within the same timeframe, where those standards are based on academic achievement.

As discussed there are tensions inherent in the prioritising of the school achievement targets, as they do not specify why 25% of students won't achieve the targets or what to do in that case. However there are also mediating factors present within the family/community, school policies and personal values some of which were presented in the previous chapters.

National standards and other academic assessment tools within the Pakeha/non-Maori Aotearoa/New Zealand context can place a value on children, based on their academic performance (Flockton, 2010). I think that this was what Marama's father was rejecting, in saying that Marama was merely different from the norm and that the current perceived educational failures of Marama would not actually matter or indeed exist in the long term.

When labelled as “below standard”, the implication for children who are less able is that they are of less inherent worth than children who are at or above standard. For students with learning needs, who do not meet ORRs/ORs criteria, this creates an expectation that they are going to be ‘less than’ others. This can then lead society and/or some teachers to the view that these children are therefore less worthy of spending time teaching (Goodall, 2011b). Alternatively, as with Ahorangi, this sort of labelling can lead to an understanding of the limitations of the assessment tools.

Along with Ahorangi’s rejection of formal assessment of Ira and Iorangi, Kaiwhakaako was also not convinced formal tests would reveal anything useful about Paikea or Hari, nor paint a picture of a real person with real interests and real needs. This thought highlights one of the tensions inherent in the current assessment based educational system, as summed up by Morton (2011); the “system is structured to only allow a very few people to be successful, and a system that privileges those, excludes others”. Success in this system is academic achievement as validated through NCEA exam results in high school. Tests and assessments in the early years are used to signal who has learnt specific things and who has not, as well as to allocate extra resources for support or place students in perceived ability streams.

When teachers have students, like Marama, Tui, Paikea and Hari who really struggle to make discernible progress in the academic curriculum, they are seen by the system as being less able than students who succeed. Seeing students as less or unable to learn can create a tension for teachers seeing students as learners and themselves as teachers (Morton, 2011).

Māhita: “Marama really doesn’t seem to have learnt anything, or in fact to have done anything. Most of the time Marama is just sitting there doing nothing, with a blank face. How do I help Marama to learn?”

This comment can be understood as validating the tensions suggested by Morton (2011). Marama’s perceived lack of progress was backed up by the imposed assessment regime, but not supported by detailed observations of changes in name recognition, phonetic knowledge and skills, vocabulary and meaningful exchanges. Māhita was starting to construct Marama as not being a learner, and therefore was struggling to see self as teacher in relation to Marama.

Even when I talked with Māhita about progress that Marama had made, or gave feedback on observed strategies that had a positive impact on Māhita, this did not seem to influence Māhita’s belief of being unable to teach Marama successfully. In looking at the details of data presented in relation to Māhita in chapters four to six, I think that through one-sided interactions with Marama, Māhita had developed as construction of self as unable to make an impact as well as Marama being unable to make observable progress.

In the iterative process of teaching, with planning, delivery and evaluation Māhita was accustomed to having an impact, seeing or hearing a response. As Marama was rarely interactive there were few responses for Māhita to put into the evaluation stage and this may be another explanation for Māhita’s view of self in relation to Marama. Having listened to and understood the frustrations expressed by these teachers around their efforts to assess, plan for and evaluate their teaching of these students on the AS, I tried to ensure that my approach to these teachers was one of collaboration, where I brought my experience and expertise, but I was honest and said if something was outside of my skills and knowledge. In this way, I hoped that we would co-construct images of ourselves as learners, rather than failures, when needs of

students were not being met at that point in time. In these cases, I and/or the teacher would research online or talk to other teachers and then get together and discuss the findings and draft a strategy together. Within the AAT framework that I used, contextual mediators were school policies, community expectation and norms, input from myself, the teachers' own ethics/values, expectations and other tools in working towards a goal of effective implementation of co-constructed teaching choices that we thought would best meet the needs of the students on the AS. However, in working collaboratively I found that the teachers in this research only moved towards implementation of suggested teaching strategies that I made if they thought that the advice or plan being offered was worth trying. This is an example of how teachers resolve conflict (Lampert, 1985).

Initially whether or not a strategy was worthwhile trying this seemed to be decided by teachers on the basis of "gut feeling," (Kaiako) about whether or not my ideas were likely to work, rather than if they were evidence based best practice. All my suggestions were based on the ASD guidelines (Ministries of Health & Education, 2008), lived experience information from other older students on the AS and connected to both my own and the other teacher's existing knowledge.

A review of my written recordings of the conversations with the teachers revealed that teachers interactions with members of the community were often mediated by their perception of the related division of labour. For example if an outside professional was perceived to be part of the educational community but not willing to play a part in the labour of teaching then the teacher's interactions with that professional were not reported as being useful or helpful. For example, drawing up an intervention or support plan without discussing it in depth with the

teacher, but expecting the teacher to implement the plan was mentioned as being unhelpful and not very useful (Kaiako, Ahorangi, Kaiwhakaako).

Additionally teachers took advice from other outside support professionals only when they had a positive relationship with that person (Goodall, 2011a). Teachers accepted and valued support professionals when they felt valued and supported as people and as professionals.

Kaiako: “When the speech language therapist comes in, she always greets me by name, asks me how I am and how things have been going for Tui. She reports back on Tui’s progress and this lets me know all the things I am doing right. The comparison with the ed. psych, who didn’t know my name, didn’t give me any feedback about anything I was doing right.... I can’t be doing everything wrong, I don’t believe that.”

Kaiako: “The ed. Psych. didn’t even ask me if this was a typical session for Tui, or what strategies had been used effectively/ineffectively. I’m not sure they knew as much as I did, let alone more than me!”

Kaiako is not alone in these thoughts, McGregor and Campbell found that, “the majority of teachers considered that support from educational psychologists was inadequate; many teachers viewed them as unhelpful and believed they should spend more time in the classroom and provide practical strategies for coping.” (McGregor and Campbell, 2001, p201)

Analysis of teacher responses to interventions, advice and suggestions from other professionals validated McGregor and Campbell (2001)’s assertion that teachers feel for support professionals to be more effective, they need to spend time in the classroom, getting to know both the teacher and the student, and provide constructive feedback with an acknowledgement of what teachers are doing well.

Teachers who felt valued and respected were more likely to value and respect their support professionals. Bevan-Brown's (2010) findings that parents valued and respected teachers more when those teachers took the time to get to know and understand their children's strengths, likes and dislikes, reflect the affordances of positive relationships. Parents reported that a "positive home-school partnership was seen as invaluable and professionals who took time to listen, support and affirm parents were greatly appreciated," (Bevan-Brown, 2010, p17).

It would seem that teachers also prefer and appreciate interactions with professionals who take time to listen, support and affirm, rather than just imparting advice or guidance without and attached affirming feedback. It has previously reported that when students received no feedback or irrelevant feedback, that is feedback unrelated to the task, such feedback was negatively related to achievement," (Alton-Lee, 2003, p28). This research indicates that teacher effectiveness can also be negatively related to a lack of supportive feedback.

I suggest that in order for external support professionals to be effective, they spend some time getting to know and establish positive relationships with both the student and the class teacher, much as teachers need positive relationships with students in order to be most effective (Alton-Lee, 2003; Bevan-Brown, 2010). Once positive relationships have been established, the external support professionals can collaboratively develop more suitable plans and advice. In turn, the teacher may feel valued and so be willing to implement the advice and plans provided for the student. The student could then benefit from more effective teaching and so be able to work towards fulfilling their potential more smoothly.

7.2 *Influencing contextual mediators presented by personal beliefs and created artefacts.*

Teachers' personal beliefs, values, attitude, willingness and energy and self-created artefacts and instruments to help teachers in their planning and delivery of the curriculum all acted as mediating influences on the teachers. The findings from this thesis support those of Booth (2011) who suggests that teachers require inclusive values and beliefs in order to teach in an inclusive manner and that one of these values is the belief that all children are learners.

When Māhita stopped seeing Marama as a learner, the constraining effect on Māhita's teaching was observable. In contrast, Ahorangi's opinion of Ira and Iorangi as learners was evident in the collaborative assessment of their work and the individualised planning for the next learning activity. Within activity theory tools are usually seen as artefacts used that afford and/or constrain a subject in achieving their goal (Engeström, 1987). However, within the complex teaching context it is entirely possible that a tool may be helpful in the overall goal of effective teaching, but distract from a sub-goal of effective teaching of particular students as discussed in the findings chapters. Time is an example of this as observations indicated that teachers controlled and were controlled by time in terms of 'what and who' they needed to teach in a given timeframe (Hargreaves & Fullan, 1998).

In this research the data indicated that where the personal beliefs of the teacher were such that the student on the AS was seen to be an equally valuable student as their peers then that teacher was more willing to spend one to one time with the student on the AS. Ahorangi explained that it was not equitable to spend the same amount of time with each student, but that students

should be taught in ways that enable them to succeed. Māhita's interpretation about the fair and equitable distribution of time was mediated by the construction of Marama as someone who was not a learner. Māhita expressed the idea that to spend one to one time with Marama would take time away from the rest of the class.

Kaiwhakaako's construction of all students as individuals on a spectrum of needs and strengths resulted in a variety of teaching strategies and a commitment to explain tasks to students in different ways until they were able to understand what to do. Kaiwhakaako never mentioned time or equity, but a review of our conversations reveal an emphasis on community, learning about valuing each other and ourselves. For individualisation Kaiwhakaako utilised the IEP, further discussed in the following section.

7.2.1 The IEP as a contextual mediator

One of the findings of this research, was that some teachers used IEPs to make teaching choices in regards to the students on the AS. This was a new practice as in prior years they had not implemented IEPs at all, but had seen them as a "paperwork requirement and not a planning tool" (Kaiwhakaako), and "tick box exercises" (Kaiako). Following on from the IEP and differentiation presentations at the start of the school year, the teachers were more aware of the potential usefulness of IEPs and how to implement them. During the presentation discussion it became apparent that the teachers were not familiar with this interpretation of the concept of differentiation. Most of the teachers had modified content and lowered expectations for

product, but only one had modified process or type of product expected from the student (Ahorangi).

In order to understand what could be beneficial to the student, the teacher first needs to have an understanding of the student's overall readiness to learn, preferred learning methods and interests. This fits well with the idea that students on the AS think, learn and do differently from others and so need modifications in order to achieve their potential (De Clerq, 2011). IEPs are tools that can be regularly adapted or reviewed and modified at fixed intervals, in this case every term.

In order for teachers to put together as complete a picture as possible of students, they need to gather information about interests, needs and strengths of each student (Bowen & Plimley, 2008; De Clerq, 2011; Ministries of Health and Education, 2008). Without this knowledge it can be difficult to put together any form of differentiated learning that accurately matches the needs of the student. Some of this information can be gleaned from previous teachers where possible; however the teacher needs to put together as complete and up to date a picture as possible (Alton-Lee, 2003), which can take a lot of time.

This picture is vital for effective IEP planning and implementation (Bowen & Plimley, 2008). It is also important in the development of appropriate differentiation and teacher effectiveness as perceived by themselves and others. If teachers see themselves as effective then they are more likely to plan appropriate activities and expend effort in finding appropriate teaching materials and strategies. Kaiawhakaako reflected on the importance of having a well-informed learning profile for the students on the AS as being useful for effective planning, especially where those students have limited communication skills.

IEP meetings can be efficient tools for gathering relevant information because they involve the whole team that supports the student, including family, support staff and specialists (UNESCO, 2009). Over time the teachers build a better picture of the students they teach, but when first getting to know a student on the AS, it can be difficult to know what will spark that student's interest.

Having strategies and resources written into the IEP helped teachers see how the goals could be integrated into, or used to justify over-riding class planning for the term. This happened when teachers could not align IEP goals with the general class planning.

Ahorangi: "Both Ira and Iorangi have social skills goals on the IEPs, but we don't have time this term to do this in class, and the other kids have already got a higher level of skill in this area, they need to start right at the beginning. If you don't run the social skills programme this term then these goals won't get worked on."

Teacher feedback was very positive about the ease of use and the usefulness of this new IEP model, as they felt it enabled them to track progress more easily.

Kaiwhakaako: "It is great to see the progress that Paikea has made, meeting all three goals last term was a real achievement. I think it sets Paikea up for further successes. When we had those ten page IEPs that we reviewed every six months I never looked at them and when it came to the reviews, the goals hadn't even been looked at, let alone achieved."

One implication is that this may help teachers in the construction of their students as learners. "There is systematic evidence that teachers who have a strong sense of their own efficacy, who believe they can make a real difference in their students' lives, really do. The prophecy is self-

fulfilling and it works in even the most challenging communities” (Hargreaves and Fullan, 1998, p.1). Teachers who expressed low expectations of their students could be directed to prior IEPs over the year to review the student’s progress. In some instances this helped to halt negative self-fulfilling prophecies. This in turn helped to sustain or work towards more positive attitudes being co-constructed between the teachers and their IEP teams around perceived abilities and potential of their students on the AS.

However, this research also found that there were contextual factors that had a negative influence on the usefulness of IEPs as tools for supporting effective teaching of those students. I was present at every IEP for the students in this study over the school year and the summary table below presents the affording/constraining mediators observed both during IEP meetings and follow up conversations with the teachers.

Table 24 - Contextual factors the usefulness of IEPs in the effective teaching of students on the AS

Contextual factors that have a constraining effect on usefulness of IEP in the effective teaching of students on the AS	Activity theory framework category	Contextual factors that afford the effective teaching of students on the AS through the IEP
Differing expectations and priorities for the student from each team member create difficult and time consuming meetings	COMMUNITY	Team decide on priorities and expectations and agrees implementation strategies
Family/whanau members unable to attend meetings without multiple rescheduling of meeting, which requires lots of teacher time		Family/whanau members attend all IEPs and bring lots of relevant information to inform planning
IEP goals are met but not celebrated, or goals are not met by student, both of which can be disheartening for the teacher		Each success or achievement is celebrated, this can create more expectations for success and facilitate a feeling of effectiveness for the teacher
Assessment of educational attainment may not reflect students progression and can act as a barrier to introducing new ‘more difficult’ concepts	RULES	National curriculum statement to provide a curriculum that meets student needs, which gives the team leeway to come up with innovative goals and strategies that suit that student
Literacy and numeracy standards or targets require prioritising of teaching which does not meet the holistic needs of the student		Communication improvement should be woven throughout the IEP, which can ensure the team thinks about ways to do this meaningfully
Teacher experience of SENCO taking responsibility for IEP, may mean teacher is unsure how to do this and can put it in the ‘too hard basket’ or do a cursory IEP	DIVISION OF LABOUR & TOOLS	Teacher is now responsible for the IEP and feels empowered to use existing and developing skills and knowledge to support the student
No extra adult support is available for the student. This can create difficulties about designing realistic goals that can be implemented within the classroom with no support.	DIVISION OF LABOUR/EFFORT	Student has some teacher aide hours, meaning goals can be implemented within the classroom, playground, in small groups or 1:1

Out of all these contextual factors, the division of effort and the use of teacher aides to support IEPs was the one most identified by the other teachers. Effective collaboration involves ‘joint work’, a shared division of labour involving collective commitment and improvement (Fullan and Hargreaves, 1991). The main benefit of effective collaboration, whether between teachers or teachers and others, is the ability to construct new descriptors of self that reduce teachers’

sense of powerlessness and increase their sense of personal efficacy. This sense of personal efficacy could be at the root of some teacher comments about teacher aides being responsible for the children, rather than the teacher aides working with the children under the direction of the teacher. Additionally, Māhita's poor sense of personal efficacy remained even when Māhita talked to me about my effectiveness as a teacher in relation to Marama.

In contrast, the other three teachers all specifically commented on the positive impact of our conversations where I talked about their interactions with students and highlighted strategies or activities that I had observed to be effective or useful. The teachers' comments did indicate that these types of comments did help in the co-construction of self as an effective teacher.

IEP meetings enabled teachers, students and family/whanau to plan and celebrate goals, as discussed in Chapters Four and Six. For example, Kaiwhakaako was able to express the view that Hari's new sense of belonging to the class had diminished a lot of the anxiety that was there previously and contributed to Hari's new enjoyment of school. This team sharing of knowledge about Hari and Hari's goals and progress resulted in expressions of happiness from both Hari's mum and Kaiwhakaako, both of whom were genuinely pleased that Hari was making such progress. Through this celebration of gains, shared expectations seemed to increase slightly with the team suggesting that Hari would continue to make progress through well thought out and implemented goals. This may also have helped in the co-construction of Kaiwhakaako as an effective teacher for Hari.

Table 25 summarizes the possible choices teachers were faced with due to contextual mediators through/by the IEP context as discussed in the findings chapters. Where a teacher had two students on the AS, only the contextual factors and choices relating to one of those student's

IEPs is included. As can be seen from the choices made column, the choices and their results varied widely from teacher to teacher from no/low IEP implementation to full IEP implementation.

Table 25 - Teacher choices within the complex context of IEPs

Teacher	Contextual factors present in IEP context	Choices made
Māhita	Differing expectations and priorities for the student from each team member during IEP meeting. Family/whanau members unable to attend meetings without multiple rescheduling of meeting. Literacy and numeracy priority for achievement standards. No extra adult support is available for the student No known special interest for student with ASD.	Family/whanau set one goal, teacher set one goal and one goal set jointly. IEP meetings took place without family 2/4 times in the year. IEP not implemented as planned due to lack of extra adult support and priority of literacy and numeracy.
Ahorangi	Family/whanau members unable to attend meetings without multiple rescheduling of meeting. National curriculum linear progression of educational attainment may not reflect student's progression. No extra adult support is available for the student. National curriculum statement to provide a curriculum that meets student needs Well known special interest.	Ahorangi spent days trying to rearrange IEP meetings to ensure family/whanau voice. This resulted in only ¼ IEPs occurring over the year. Ahorangi and family agreed student need and learning style was priority and goals very individualised, using student's special interest where possible.
Kaiako	IEP goals are met but not celebrated by family/whanau as they never come to any IEPs. Communication improvement should be woven throughout the IEP. Behavioural issues are a priority. Teacher aide and speech language support time available. Student has known motivator.	Kaiako and myself as researcher completed all the IEPs without family/whanau input. Goals in communication and behaviour chosen to efficiently utilise adult resources, using student's known motivator.
Kaiwhakaako	Teacher experience of SENCO taking responsibility for IEP. Student has some teacher aide hours Family/whanau members attend all IEPs and bring lots of relevant information to inform planning and team decide on priorities and expectations and agrees implementation strategies. Each success or achievement is celebrated.	Kaiwhakaako felt empowered and enjoyed sharing and celebrating success. Goals chosen to maximise student's enjoyment of school and increase self-confidence and independence skills.

All of the teachers aimed to implement their students' IEPs but a review of the IEP reviews suggested that some of the teachers were more successful at this than others. Key factors about

why implementation was not as thorough as the teachers would have liked were time, adult support (division of labour) and competing priorities, for example those discussed in the findings chapters relating to Marama's family opposing extra support for Marama or assessment policies.

Where the IEP team had similar expectations and shared goals, the IEP process was generally supportive and afforded teaching of the student on the AS. However, where IEP team members had very conflicting ideas the meetings were observed to be terse and less collaborative.

Summarising the affordances and constraints of using IEPs demonstrated that writing an IEP does not in itself mean that teaching will be effective. It is the implementation of the IEP that supports effective teaching of students on the AS and this required several things: time to implement the IEP strategies, or other adults to provide that time (division of labour/effort) or a prioritisation of IEP so that the IEP was used during planning and curriculum delivery. Teachers also needed to prioritise the IEP over and above competing and sometimes conflicting demands to be most effective for their students' achievement of learning goals.

As mentioned in Chapter Five, a key aspect of how/why the teachers made the choices they did in regards to time, division of labour and rules was personal opinion and willingness to follow through. This willingness was related to either willingness to teach specific content or in a specific style/manner to meet the needs of the students on the AS.

7.2.2 *Contextual mediators influencing student's perceived value*

At the outset of this research I had not thought to investigate teachers' values of their students, presuming that all teachers valued all students equally, as this is how I feel. However, observations and conversations demonstrated that teacher's values were a contributing contextual factor in the in/effectiveness in teaching students on the AS. As an example, Kaiwhakaako talked about personal experiences of school as a place of difficulty and not fitting in, a scenario Kaiwhakaako was upfront about wanting to prevent for others. As previously explained this experience framed Kaiwhakaako's attitude to the students, who were all seen as having value of being an important member of the class.

Kaiako had years of experience teaching children with serious behaviour difficulties and expressed strong feelings around the need for teachers to value all children and the need for different strategies to be used to support different children.

Kaiako: "Some of these kids have awful lives at home. If all you see at home is violence, how do you know you know that it's not ok to hit someone when they annoy you at school? It's not their fault they don't know, we need to teach them new strategies to manage situations and express their feelings."

Kaiako talked about understanding that a child does not leave their home life at the school gate, and the influences; both positive and negative, that home life could exert over children. "When Tui hits someone, is it because that's what happens at home or is it because of Tui's poor impulse control, or is it both? I need to help Tui understand that hitting is never ok and teach Tui strategies to help with impulse control and aggression."

Disability studies and inclusive education researchers use an ecological model or constructivist framework for detailing how the interaction of impairments/differences and contexts create disabilities and exclusions (Morton, 2011; Sullivan, 2011). Where a teacher framed a student in terms of their deficits, such as Marama not being able to write in the same manner as their peers, this creates a very different interaction with the classroom context than the framing of a student as having difference in learning style.

Emma: “Marama learns differently to their peers, and this means your teaching, which meets the needs of the rest of the class, doesn’t match their learning style.”

Māhita: “Yes, but I don’t know how to teach Marama, nothing I do makes any difference, Marama just hasn’t made any progress, still can’t write a sentence unaided.”

I was using my interpretation of Marama as a learner to support the co-construction of Māhita as an effective teacher for all students. However, Māhita’s framing of Marama as less able than to learn, drove the construction of Māhita as not having the knowledge needed to teach Marama. This had the effect of ‘othering’ Marama, although my comments could also have been seen to set Marama aside as other, the rest of the conversation included examples of where other students also learnt differently in different areas of the curriculum.

The view that some children are not worth spending time on, that teaching is partially or even mainly about the need for the majority to make progress and the minority are othered. This is a view that Māhita voiced in the context of facilitating the 75% of the class achieving the school standards. In the context of a large and difficult class, with several children just beginning to

learn English, several with moderate to severe learning and/or behavioural difficulties, it is understandable that a teacher needs to make judgement calls about how to distribute their time.

Māhita: “I just don’t have enough time to give Marama all the 1:1 support that is needed. It isn’t just getting Marama to understand and start a task, but to stay on task and not wander off or get distracted and forget what to do. We can do the same task day after day, but Marama hasn’t made any progress in understanding what to do or when to do it, so still requires the same amount of extra support as the first time we did the task.”

These comments reflected my observations. Marama worked at a significantly higher level when receiving a prolonged 1:1 support. Brief 1:1 support was rarely effective in engaging Marama to participate in or learn from an activity. Thus it could be seen as legitimately effective teaching to not spend brief periods of 1:1 with Marama when Māhita could see that a sustained period of 1:1 was not going to be possible. When put alongside the views of Marama’s family, this view of not providing 1:1 support when it was not possible to do so with any meaningful outcome was meeting the wishes of the family and the majority of the class. As an aside, it is worth noting that Marama personally enjoyed 1:1 support, as the company of adults was much preferred to the company of peers.

It would be interesting to investigate why some teachers value some students over and above others more widely. In this research it seemed to be related to how teachers viewed autism, whether they saw it as a ‘dis-abling disability’ or a ‘difference with potential’.

How teachers viewed their students in this research affected prioritization of competing contextual factors. The low expectations held by some of the teachers for their students on the AS accords with statistics with regards to the unemployment levels of adults on the AS (Attwood, 2011) but the idea of AS as lacking in potential or ability to learn does not accord with the known potential of students/adults on the AS when given the right supports (Winter, 2012). As Marama's father indicated, the skills of students on the AS of extreme attention to detail, ability to focus single-pointedly for long periods of time and a literal understanding of language make them ideal candidates for many science and technology-based careers (Grandin, 2010).

Talking to teachers, schools and parents about what adults on the AS have achieved and are achieving could help to build a broader picture of the true potential of students. These expectations should then help teachers to scaffold learning so that the student's learning is facilitated in such a way that they can achieve their true and full potential (Grandin, 2002).

All the teachers said they rarely if ever receive positive feedback about their teaching and the student's learning (including learning communication, social and behavioural skills), and as explained in Chapters Four and Six, it was this that enabled them to know when they were doing something right and then they would probably use that skill/knowledge again in the future. They also expressed the views that this feedback helped them to identify progress made and therefore highlighted the growing potential of their students on the AS.

These teachers all felt that the most valuable resource that I provided over the school year was the positive feedback and emotional support embedded in our conversations following each

classroom observation (Goodall, 2011a). Teachers stated that feedback in the form of seeing progress or receiving input from other adults helped most of them to refine their understanding of the AS as a difference that needs different teaching strategies and, as discussed in the following section, it also affected teacher willingness.

Kaiako: “If I don’t know what works and what doesn’t work, how can I make sure I only use the strategies that work? This is especially true when working with Tui because change takes so long and the steps are so small. If I get feedback that someone else has seen progress, it helps me know I am on the right track.”

This showed that teachers do not always try out something just to see if it will work, and if it works or seems to work, include that strategy in their repertoire to always use again (Timperley et al, 2007). In this research, this may be because it often seemed difficult for teachers to identify if something was ‘working’ or seeming to work, as with Māhita being unsure if Marama had mastered counting to ten or not.

Usually teachers are trying to teach an aspect of curriculum, they feel that they are being effective if the child can present information that demonstrates understanding and/or application of the new knowledge or skill. However, in this research, teachers could have been focusing on diminishing physical assaults or increasing attention to and understanding of class rules and routines. Progress on modifying behaviour can be sporadic and can be hard to observe on a daily basis. It can be difficult for teachers to evaluate the learning of their students through observation because of the amount of contextual information that influences student learning. When discussing ways of observing Jones & Somekh (2008) noted that participant observers (which could include teachers) may be distracted from their observations because of their need to participate in the wider group activities. This is partly because teachers are extremely busy in

their own classrooms and partly because it can be easier to identify what is not happening/working, rather than what is (Goodall, 2011a). This means that teachers may not identify the strategy as working or not until there are easily observable changes, for example; no physical assaults in a day or the child follows all rules and routines.

A focus on the belief that the student does have the potential to achieve the goal is therefore a key aspect to continuing to work on the goal. Māhita's comments about being unable to, or not knowing how to teach Marama suggest that conversely teachers can feel their teaching is ineffective or lacks quality where a student does not make observable progress. Māhita's focus on a perceived lack of progress may have been due to a lack of knowledge about the length of time that it can take to change behaviours or make progress in an area of learning that a student is struggling with (De Clerq, 2011) and partly due to the educational system's focus on what children can't do rather than what they can do. In contrast, Kaiako was very aware of the time needed to help Tui minimize aggressive actions as discussed in Chapter Four. Being aware of this Kaiako was prepared for the changes to be small and slow, rather than fearing failure if things were not improving rapidly.

Until 2010, Group Special Education Canterbury's year by year teacher aide funding was allocated on the basis of what children could not do, using a numerical scale. As a result children were often framed in the language of can't, not able to and so forth. This deficit model has therefore been placed within the educational context for students on the AS by the Ministry of Education. Deficit modelling also underlies much of the initial application for ORRS/ORs funding for a child who is struggling to attain at the level of their same age peers, where one has to prove how much less able the child is than their peers (Ministry of Education 2006).

Recent changes to the year to year teacher aide funding have moved away from being a deficit model and now use a framework to position the student within a range of skills and supports needed (Ministry of Education 2011). However, it is clear that when there is a finite pool of money available to support special needs students, there needs to be a way to ensure the money is distributed according to need. Funding often defines the resourcing that can be made available to a student and where need in this context is described through skills/functioning deficits and so there is no escaping an element of deficit modelling in funding allocation.

The teachers could see usefulness in both strengths-based and deficit model strategies when planning for their students on the AS. How they framed these was quite different from teacher to teacher, with Māhita struggling to see ‘self as teacher’ when framing Marama using a deficit model, which highlighted the lack of learning. Morton (2011) suggested that teachers who do not see students as learners find it hard to see themselves as teachers. It seemed as if the use of strengths or deficits in identification and planning was not the key influence for these teachers, rather it was the framing of the students as having the potential to learn/progress or being ‘disabled’ by their autism. This is further illustrated by the following comments.

Kaiwhakaako: “If Paikea can’t climb the climbing frame and I know that, name that and then use that to help Paikea develop friends through shared climbing frame time, why is that negative? Yes it is talking about what Paikea can’t do, but it’s using that knowledge to develop and improve what Paikea can do, building strengths.”

Māhita: “When Marama is staring blankly into space and not interacting at all, I have no idea if anything I am saying is going in or even registering. I’m not sure this is the right place for someone with autism, it doesn’t seem as if I’m able to teach Marama anything.”

An interesting aspect of this exploration was Kaiako's understanding of Tui as being "dis-abled by a lack of impulse control" but being able to make progress to develop more impulse control, having the potential to learn to manage behaviour and emotions in the long term. Another view that was uncovered was one of seeing students as "trapped by their autism". In this view the teachers felt that students could make progress and have potential if a way to reach them could be found. This view is problematic for me personally as it suggests autism is a tragedy and does not recognise any of the skills present within autism.

7.2.3 The influence of teacher willingness to teach students on the AS

It was apparent through the observations and in talking with the teachers that teaching these students on the AS was at times more difficult and required more energy (both emotional and physical) than teaching other students in the class. However, it was hard to ascertain what was affecting teacher willingness, to teach their students on the AS until I started analysing the teachers' attitudes and values about the students and the teachers' understanding of the purpose of education.

As explained in Chapter Three, Māhita thought that teachers are there to teach academic skills, a view that seems to be more common amongst teachers from countries with an emphasis on testing primary school age students, like the USA and UK. This view, combined with the fact that Marama really struggled to make visible progress in reading, writing and maths resulted in Māhita prioritising reading, writing and maths over other elements in the IEPs. There was no family/whanau input after the first IEP as they declined to attend, because of their desire for Marama not to receive anything different from the rest of the class.

Māhita: “Reading, writing, arithmetic, the three Rs. They are all really important. It’s important to get a good base down so the children can learn other things later.”

One of the contextual factors that teachers were aware of was the need for their students on the AS to have extra teacher input in order to achieve, and that this input could be seen to be detracting from the class. This extra input was perceived of in terms of teacher time to teach or prepare to teach due to communication difficulties and/or differences in learning levels and/or styles from the rest of the class (Bacon, 1994). Whether or not the teacher was willing, or able, to supply this extra input varied both between teachers and for each teacher, as demonstrated in the following quotes:

Ahorangi: “Iorangi can be really frustrating when on a work avoidance phase....Sometimes, I’m just too tired to do any of those extra things, it’s not just that it takes more time often it is that extra energy that’s hard to find.”

Māhita: “I’m just not sure if regular is right for everyone... for lower functioning children, I’m just not sure. Maybe they would get more out of special school.”

Māhita’s view reflects that of society, as the very existence of both types of schools implies that both are needed and that special schools are better for some students than regular schools. The idea of full inclusion, where all students are educated in the regular and where all adults can live and work in the same communities is not reflected in the current reality of life in Aotearoa/New Zealand (Sullivan, 2011).

To expect that teachers should all be supportive of full inclusion is to expect teachers to be out of step with the wider community. If the aim of inclusion is to move towards equity for all

students and staff within schools while recognising and valuing social diversity, and challenging existing cultural parameters of perceptions and expressions of normality (Runswick-Cole, 2011), teachers need to be able to recognise and value diversity for themselves. If the state has not mandated the training of teachers to include knowledge about diversity and difference and the skills needed to teach a wide range of learners, nor resourced teachers for students with high needs for one to one communication, then it seems unreasonable to expect all teachers to be of the view that inclusion is always right and has no drawbacks for self, peers, student or environment.

In looking at the teachers inclusion of their students on the AS, conversations and early observations of the teachers and the children on the AS, suggested that the initial information given by teachers about their knowledge of autism and attitudes to the AS were framed by their personal values of children and their understanding of what it means to be a teacher. This accords with constructivist beliefs of knowledge (Yamagata-Lynch & Haudenschild, 2009). Teachers who said they had experienced difficulties themselves or teachers who had strong beliefs in the value of all students were more able and willing to see the students on the AS as individuals and to take into account their needs and wants as well as those of their families/whanau for those students.

Bevan-Brown (2006) suggested that parents of students on the AS would like their children to feel accepted and make friends among their peers. However, McGregor & Campbell (2001) felt that, although suggestions that peer support, whether implicit or explicit, may be of lasting value to children with autism, it is difficult to discover how well children across the spectrum are integrated into regular schools without specific specialized programmes to promote

interactions with peers. The ASD guidelines (Ministries of Health & Education, 2008) suggest that students on the AS need to be specifically taught these social skills.

A number of researchers highlighted the issue that regular students rarely choose to play with their special needs classmates during playtime (McGregor & Campbell, 2001) and that social connectedness between students on the AS and their peers are rare. Māhita was concerned that despite directing students to play with Marama, Marama did not make or sustain friendships and seemed to not get any social benefit from attending their local school.

All the older students were able to sustain playtime social connections once they had completed the social skills course. Ira would often still choose to play alone, but could play with others over two or three breaks in a row towards the end of the year. This course was part of the students' IEPs with goals being around developing/increasing social interactions with peers to enable students to play with and/or work in groups with their peers.

Paikea's mum said; "It is so good to see Paikea playing with friends when I arrive at school, but the most wonderful thing was the invitation to one of those friend's houses for a birthday party. At the previous school in all the years Paikea attended there wasn't one invite home."

It may not have been as a direct result of the social skills group that these students achieved their goals of having friends to play with, but more of a combined effect of that and being in classes where individuals in all their difference were celebrated. The class teachers and family/whanau were able to incorporate the weekly social skill into other contexts as I let them know each week what we were learning, how it could be practised and opportunities to apply it to other contexts. This feedback was via the students' home-school books and orally to the teachers.

Social skills were not taught explicitly in class as teachers said they did not have time to do this. For the teachers, time was a constraint to meeting the needs of students in a similar way to energy. Teachers only have a finite amount of energy, with the amount available on a given day varying with a number of factors. However, low teacher energy seemed to impact on 1:1 support for students on the AS as the teachers tried to manage the workload as energy efficiently as possible. The feeling of being supported seemed to help teachers feel more energetic. Teachers' enthusiasm and energy was observed to wax and wane with circumstances and events.

Time can be a factor providing tension in the overall scheme of the teaching day, but also in the minutiae. For example, the choices presented to Māhita when trying to get Marama to join in with reading group discussed in Chapter Four, and adult support choices around getting Marama to do curriculum work, introduced in Chapter Six. The table below summarizes the wider contextual factors, introduced in Chapters Four, Five and Six, faced by Māhita and the importance of having adult time to support Marama and the likely results for prioritization of each factor. As can be seen, in table 26, an understanding of Marama's learning and communication styles is also a contextual mediator.

Table 26 - Wider contextual factors present while Marama was asked to be on task writing daily news:

CONTEXTUAL FACTOR	TYPE	RESULT IF CONTEXTUAL FACTOR PRIORITISED
English/literacy curriculum suggestions for learning order.	RULES	Marama was unable to work at the level suggested by age and time spent in school (if judged by the curriculum). If expected to write even one sentence “about your news”, Marama would sit and do nothing.
No adult available to spend the time working 1:1 through task with Marama.	DIVISION OF LABOUR/EFFORT	Unless an adult prompted Marama to come up with something to write, Marama was unable to come up with an idea unaided, so did nothing.
I and the family/whanau know that Marama can write up to three sentences in one go, if given adult support to chose a topic and think of things to say/write about that topic.	COMMUNITY	An adult would work with Marama to chose a topic and come up with things to say. As there was no other adult available to support Marama, if Māhita had provided this support, it is likely that Marama would have produced writing which would have demonstrated the ability to write, if given a topic.

Māhita resolved the affordances and constraints of these mediating factors when the division of labour/effort changed and a teacher aide or myself was in the classroom during news writing time and could support Marama. Outside of this Māhita felt that it was not possible to provide the support that would have enabled knowledge of Marama’s writing capabilities.

Comments presented by Māhita and Ahorangi about the negative effects on the class of students on the AS seemed to reflect reality for them as it had unfolded over the year, rather than an increase in negative attitude about the impact of the students on the AS on the rest of the class. Their comments highlighted a possible limitation with the IIQ as there is no way to tell whether a response is experientially validated or purely attitudinal and whether an expressed attitude is acted upon or not.

Willingness to teach in modified ways, whether content or teaching style/medium, was also observed in this research to be influenced heavily by the feedback received by teachers about their skills, knowledge and effectiveness around teaching students on the AS. This feedback could be from a range of people and in a variety of forms. However, during this research it was mainly in the form of oral feedback from myself to the teachers.

As discussed in Chapters Four and Six conversations about successes when working with their students on the AS were highlighted by teachers at the end of the year as being the most important and useful factor of my research. Interestingly for me, it was not the knowledge and possible strategies that I shared with the teachers, that was felt to be the most beneficial aspect, it was my support for what they were trying and doing. The following comments provide further insight into the rationale provided by teachers about why feedback was so important to them:

Kaiwhakaako: “When I get feedback about what I am doing right, what is working for my kids, that makes me feel good, but it also makes me feel valued and respected for what I do. I don’t think teachers get enough positive feedback, normally all we get told is what we are doing wrong.”

Ahorangi: “I keep going on about that behaviour plan, but really, I’d been made to feel I couldn’t do it, couldn’t manage Iorangi, and then that plan was useless. When you brought up specifics about things you had seen and heard, told me times I had calmed Iorangi down, got Iorangi back on track working, it made me believe that I could get over this hurdle. The plan was still useless, but I knew the new version of the plan that we created would help. Before, it’s like someone could say it was me not the plan.”

The honesty of these teachers demonstrated the importance of constructive feedback in supporting teacher confidence, willingness and the effectiveness of their teaching. Additionally

the division of labour/effort in Canterbury Primary affected the time and energy of teachers and could influence whether or not willingness translated into positive engagement with the children on the AS. Engaging effectively with students on the AS, takes willingness to input time and effort as well as skills and knowledge of effective communication techniques, as it often requires a 1:1 interaction for teaching to be most effective for the child, and a good understanding of the child and why they interact with their environment and learning in the way that they do.

Even if a teacher was willing to make the effort to do ‘extra things’ to meet the needs of a child on the AS, if they were very pressed for time and/or low on energy on any given day, this did not necessarily translate into actual positive interactions. As described in Chapter Six, it seemed that the personal values/beliefs of the teacher were key at this juncture. For example, no matter how tired or ill Kaiwhakaako was, and no matter how busy or pressured for time by uncontrollable external factors outside personal control, the necessary 1:1 time with each of the students that required this was still provided.

Conversations revealed that Kaiwhakaako’s strong view that every individual had intrinsic worth and value as a human being with potential drove these positive interactions. Kaiwhakaako also felt that that was a better use of energy and time than implementing every aspect of the curriculum coverage that was expected by the school, as Kaiwhakaako personally valued the children’s growth as socially responsible beings over and above anything else, as illustrated by the following comment:

Kaiwhakaako: “If I don’t explain things again to Hari or Paikea, slowly and just to them, they won’t know what is happening, or what they need to do. If we need to spend time as a class talking about incidents, either in the playground or in class, then we do

that. We need to look after each other and to know that it is not ok to not stop kids getting hurt, or to hurt others. I have a responsibility to everyone in my class, I need to support each one of them, how they need to be supported, as best I can.”

This is not to say Kaiwhakaako’s class did not cover the formal curriculum, which it did, but it does explain the observably lower output of academic work at times throughout the year.

In comparison to this, when very tired or pressured for time due to the need to implement testing or go on a class trip, Māhita was less likely to provide Marama with the 1:1 interactions that were needed to clarify all class instructions.

7.3 Implications for myself as practitioner and researcher

During the early part of this research, I realised that I had been deficit theorising about some teachers in relation to teaching students on the AS. I suspect that the language used in the special educational needs referral systems had influenced my construction of some teachers as lacking in competence to teach these students. Referrals to support professionals require data to show that the class teacher is unable to manage the student or meet the student’s needs.

I had assumed that I could shift teacher competence by working alongside teachers, which had been my interpretation of my role at GSE prior to this research. During this study, however, I have gained a new interpretation of the complexity of teacher competence and the role of support professionals in the co-construction of teacher and student competence. I have also developed an awareness of the link between the construction of student as competent and the construction of teacher as competent.

The implications of this have been that the way I work as a support practitioner has changed considerably. I used to work in a more advisory role, going into a classroom and talking to and not with a teacher. Now, I try hard to ensure I work in a collaborative model with teachers, talking with them and their student. I aim to work collaboratively with teachers to co-construct competence as both teachers and learners. This has led to more equal relationships with teachers, where we are able to share and develop ideas and strategies.

The implications for myself as researcher are more nuanced. I have developed an interest in the social constructions of autism and how public imagery can influence teacher attitudes and values around students and adults on the AS.

7.4 Summary of useful findings from this research

From this research a number of interlinked contextual factors were found to influence teacher choices in regard to their teaching of students on the AS. Having started with the idea that skills and knowledge were probably key, I found that the data did not support this at all. I had not initially realised that teachers did not all have a clear understanding of the AS and how being on the AS affects how people interact with their environment and learning at every level.

All of the teachers had a theoretical knowledge of the AS which included an awareness that students on the AS have difficulties in social interactions and with language. However, the understanding of what this actually means for those children varied across the teachers. The teacher with minimal understanding framed their student using a deficit model, whereas the

teacher who expressed the most understanding framed their students on the AS as “individuals, with their own sets of strengths and areas of struggle, like everyone else,” (Kaiwhakaako).

This research suggests that understanding of the AS is far more important than theoretical knowledge of impairment. Equally important and linked to understanding was the influence of willingness on the teachers. Willingness to use strategies that had positive impacts on their students’ ability to access learning effectively, such as one to one explanations of tasks and task adaptation, appeared to be directly related to the use of these strategies. However, without an understanding of the AS, it was difficult for the teachers to know which strategies to use. Interestingly the data suggested that if teachers were willing, even without a clear understanding, they would trial and evaluate suggested strategies, such as breaking instructions down in single phrases.

Willingness appeared to be overwhelmingly influenced by the teachers’ own personal constructions of the AS and whether or not they perceived that students on the AS have potential as learners and worth as valued members of the class. This research confirmed that teachers’ attitudes towards disability are a key factor in the inclusiveness of teaching (Macartney & Morton, 2011; Tait & Purdie, 2000). The teacher, Māhita, that viewed their student on the AS, Marama, as disabled or ‘other’ did indeed view that student as being too difficult to teach, or incapable of learning (Ladd & Linderholm, 2008).

This research also concurred with MacArthur’s (2009) point that teachers who view marginalised students as ‘active and capable learners’ will examine barriers to student learning when they see these students struggling to achieve. Where a student, Marama, was not viewed in this way, the barrier to learning was interpreted as inherent to the student (Dudley-Marling,

2004). Ahorangi and Kaiwhakaako were both observed trying out strategies that they suggested were being used to get around some of the barrier to learning that they had identified for their students on the AS. In particular, Ahorangi continued to describe Ira as an active and capable learner and search for ways for Ira to demonstrate this to future teachers.

Māhita and Kaiako's conversations revealed lower expectations for their students on the AS, with more deficit focused descriptions of the students. It could be argued that a deeper understanding of the AS and the rich and varied lives of adults on the AS might enable teachers to shift from a deficit or medical model of the AS to a more social constructivist model that acknowledges the role of the environment and other contextual factors in the construction of disability (Shakespeare, 1998). I suspect that if teachers knew more about how adults on the AS live and how they had experienced school, that teachers may raise their expectations and understanding of the true potential of students on the AS. It would be interesting to do further research in this area.

I wonder if my findings would have been different in any way if I had carried out this research when having already received a diagnosis of Asperger's. I think that if I had been diagnosed and was open about this, it may have altered teacher perceptions of the potential of their students. I feel that this is a distinct possibility because these teachers had talked about Rain Man as the adult representation of the AS.

Should I do further research into teacher constructions of the potential of their students on the AS, I would do this as an openly autistic researcher and educator. In doing this, I would hope to work with teachers to co-construct a greater understanding of the positive aspects of the AS as well as some of the difficulties that are inherent in living with autism (Sinclair, 2012). The

implications of the level of openness required for this are daunting personally, but I feel the professional benefit for educators would be enormous. If teachers are able to move from a deficit view to a more balanced and nuanced co-construction of the AS, they may understand the need to enable students on the AS to develop their potential whilst minimising the anxiety of these students.

Teachers that viewed the AS as a difference and not a disability, and who were willing to try and support their students to reach their potential made teaching choices that were student focused. These choices impacted upon the effectiveness of the educational experience for the students on the AS, especially in regards to assessment policies. The implications of this were quite significant.

The effect of imposed assessment regimes on classes resulted in either less effective teaching of unfunded students on the AS or in poor implementation of those assessment regimes. Student focused teachers did not use imposed assessment regimes with their students on the AS when they felt the assessments were not useful for those students, if they saw those students as having potential. Additionally these teachers continued to use one to one communication and teaching interactions with their students on the AS, even when they thought the students would not achieve the expected level of academic achievement required of their class.

However, if the teacher did not view the student as a learner, then their level of willingness to use personalised strategies was observed to decrease. In this case the teacher focused on the other students in the class and did not provide the supports that the student on the AS required in order to access the curriculum. The data suggested that teachers who did not see students as learners, did not value those individual students within their classes. This meant that they

neglected to ensure the participation of these students in meaningful activities, designed to maximise their potential. This in turn hindered the emotional inclusion of students, achieved through valuing all individuals, which is required to ensure inclusive classrooms that aim for equity for every student (Grandin, 2010).

In evaluating strategies to use in trying to ensure the meaningful participation of the students on the AS, these teachers used external support professionals' advice and input only when the teachers felt that the external professional knew and respected them. Respect was interpreted as existing when there was positive feedback provided by the external professional. Teaching effectiveness of students on the AS in this study was positively influenced by verbal feedback from myself as colleague and researcher about observed teaching successes and linked ideas showing how to use these teaching strategies to meet other challenges. The teachers found this feedback to also act as an emotional support which enabled them to see themselves in a more positive light, even if only occasionally.

This positive effect relied upon open, honest and trusting communication in the classroom, using specific positive feedback linked to collaborative problem solving. If this finding is more widely applicable, it would be useful for all professionals to form positive interpersonal relationships with the classroom teachers with whom they interact as the teachers would be more likely to co-construct and implement new strategies to meet the needs of their students.

In summary, the contextual factors that were most identified to afford teacher choices in the effective teaching of students on the AS were a willingness to be student focused, having a belief in the value and worth of the student as a person and a learner and having an understanding of what it means to be a student on the AS. Teachers could have little

understanding but still have belief in the value and worth of the students and the willingness to be student focused. However, without understanding the student focus is less effective than with understanding because strategies can be chosen that are not as effective as they could be.

The implication of this is that it may be possible to increase the effectiveness of the teaching of students on the AS by equipping teachers with accounts of lived experience of people on the AS throughout childhood and into adulthood. This could facilitate an understanding of what it means to be on the AS and how this actually influences thinking, learning and doing styles of their students on the AS. Further research could be carried out to investigate if teachers can develop a solid understanding of the AS from this and if it does result in a willingness to engage in student focused teaching that utilises strategies that match the needs of individual students on the AS. I have developed a workshop that presents some of these concepts to teachers, followed by an interactive session on problem solving classroom issues experienced by the teachers with their students on the AS. Initial data from this has indicated that teacher willingness increases as their understanding of lived experience on the AS increases.

To be an effective teacher for students on the AS, teachers need to not only have an understanding of the AS but to be able to validate the AS experience of the learner by using their understanding to make sense of the student and co-construct the learners needs and strengths. In addition teachers need to be able to value the student as a learner and envisage the learning potential of the student, whilst having a willingness to meet the needs of the student. The implication of this is that as the teachers construct the students as learners, they also construct themselves as teachers (Morton, 2011), which in turn increases their effectiveness as teachers.

This research suggests that teachers who see value in and care about their students on the AS are the most willing and able to teach their students effectively. Even without an in-depth understanding of the AS experience, these teachers accepted that students on the AS interact with and interpret the world differently and so learn in different but equally valid ways. This acceptance may enable teachers to construct their students as different rather than less-able than their peers. This research also found that teachers who value their students on the AS as learners expressed higher levels of willingness to try and meet their learning needs. It may be that increasing teacher understanding and/or acceptance increases teacher constructions of these students as valuable members of the class, who have potential, in turn increasing teacher effectiveness for students on the AS.

8. References

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Appendix 1: Diagnostic criteria for ASD

(DSM-IV-TR and ICD-10)

(Appendix 4 of: Ministries of Health and Education. 2008. *New Zealand Autism Spectrum*

Disorder Guideline Wellington: Ministry of Health)

1. DSM-IV-TR 299.00 Autistic Disorder

A. A total of six (or more) items from (1), (2) and (3), with at least two from (1), and one each from (2) and (3):

(1) Qualitative impairment in social interaction, as manifested by at least two of the following:

(a) Marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction

(b) Failure to develop peer relationships appropriate to developmental level

(c) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (eg, by a lack of showing, bringing, or pointing out objects of interest)

(d) Lack of social or emotional reciprocity

(2) Qualitative impairments in communication as manifested by at least one of the following:

(a) Delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gestures or mime)

(b) In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others

(c) Stereotyped and repetitive use of language or idiosyncratic language

(d) Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(3) Restricted repetitive and stereotyped patterns of behaviour, interests and activities, as manifested by at least one of the following:

(a) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus

(b) Apparently inflexible adherence to specific, non-functional routines or rituals

(c) Stereotyped and repetitive motor mannerisms (eg, hand or finger flapping or twisting, or complex whole body movements)

(d) Persistent preoccupation with parts of objects

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication or (3) symbolic or imaginative play

C. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder

299.80 Aspergers Disorder

A. Qualitative impairment in social interaction, as manifested by at least two of the following:

(1) Marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction

(2) Failure to develop peer relationships appropriate to developmental level

(3) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (eg, by a lack of showing, bringing or pointing out objects of interest to other people)

(4) Lack of social or emotional reciprocity

B. Restricted repetitive and stereotyped patterns of behaviour, interests, and activities, as manifested by at least one of the following:

(1) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus

(2) Apparently inflexible adherence to specific, non functional routines or rituals

(3) Stereotyped and repetitive motor mannerisms (eg, hand or finger flapping or twisting, or complex whole-body movements)

(4) Persistent preoccupation with parts of objects

C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.

D. There is no clinically significant general delay in language (eg, single words used by age 2 years, communicative phrases used by age 3 years).

E. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behaviour (other than in social interaction), and curiosity about the environment in childhood.

F. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.

299.80 Pervasive Developmental Disorder Not Otherwise Specified (Including Atypical Autism)

This category should be used when there is a severe and pervasive impairment in the development of reciprocal social interaction associated with impairment in either verbal or nonverbal communication skills or with the presence of stereotyped behaviour, interest, and activities, but the criteria are not met for a specific Pervasive Developmental Disorder, Schizophrenia, Schizotypal Personality Disorder, or Avoidant Personality Disorder. For example, this category includes ‘atypical autism’ – presentations that do not meet the criteria for Autistic Disorder because of late age at onset, atypical symptomatology, or subthreshold symptomatology, or all of these.

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ICD-10

F84 Pervasive developmental disorders

A group of disorders characterized by qualitative abnormalities in reciprocal social interactions and in patterns of communication, and by a restricted, stereotyped, repetitive repertoire of interests and activities. These qualitative abnormalities are a pervasive feature of the individual’s functioning in all situations.

Use additional code, if desired, to identify any associated medical condition and mental retardation.

F84.0 Childhood autism

A type of pervasive developmental disorder that is defined by: (a) the presence of abnormal or impaired development that is manifest before the age of three years, and (b) the characteristic type of abnormal functioning in all the three areas of psychopathology: reciprocal social interaction, communication, and restricted,

stereotyped, repetitive behaviour. In addition to these specific diagnostic features, a range of other nonspecific problems are common, such as phobias, sleeping and eating disturbances, temper tantrums, and (self-directed) aggression.

Autistic disorder Infantile:

- autism
- psychosis

Kanner's syndrome

Excludes: autistic psychopathy (F84.5)

F84.1 Atypical autism

A type of pervasive developmental disorder that differs from childhood autism either in age of onset or in failing to fulfil all three sets of diagnostic criteria. This subcategory should be used when there is abnormal and impaired development that is present only after age three years, and a lack of sufficient demonstrable abnormalities in one or two of the three areas of psychopathology required for the diagnosis of autism (namely, reciprocal social interactions, communication, and restricted, stereotyped, repetitive behaviour) in spite of characteristic abnormalities in the other area(s). Atypical autism arises most often in profoundly retarded individuals and in individuals with a severe specific developmental disorder of receptive language.

Atypical childhood psychosis

Mental retardation with autistic features

Use additional code (F70-F79), if desired, to identify mental retardation.

F84.5 Aspergers syndrome

A disorder of uncertain nosological validity, characterized by the same type of qualitative abnormalities of reciprocal social interaction that typify autism, together with a restricted, stereotyped, repetitive repertoire of interests and activities. It differs from autism primarily in the fact that there is no general delay or retardation in language or in cognitive development. This disorder is often associated with marked clumsiness. There is a strong tendency for the abnormalities to persist into adolescence and adult life. Psychotic episodes occasionally occur in early adult life.

Autistic psychopathy

Schizoid disorder of childhood

F84.8 Other pervasive developmental disorders

F84.9 Pervasive developmental disorder, unspecified

The diagnostic criteria for ICD-10 have been reprinted with permission from the World Health Organization.

Appendix 2: Funding Eligibility for Students on the AS

Funding is available only via the New Zealand Ministry of Education's Ongoing Resourcing Scheme (2011), previously known as the Ongoing and Reviewable Resourcing Scheme (2010).

“The Ongoing Resourcing Scheme (ORS) provide resources for a very small group of students throughout New Zealand who have the highest need for special education. Most of these students have this level of need throughout their school years.

ORS is additional to the teacher funding and operational grants that are paid to schools for every student in New Zealand. ORS' resources are primarily to provide specialist assistance to meet students' special education needs.

Any student who meets the criteria is included in the scheme. About 7000 students receive this assistance at any one time.

The scheme is for students verified with Very High or High needs at the time of application and where it is clear they will continue to require the highest level of specialist support until they leave school. Information in the application must confirm the certainty of this decision.

Eligibility

Students are eligible when they meet at least one of nine criteria. They require intervention from specialists and/or specialist teachers for access to the New Zealand Curriculum, and/or adaptation of curriculum content.

To meet the criteria they must have significant educational needs that arise from either:

extreme or severe difficulty with any of the following:

- learning
- hearing
- vision
- mobility
- language use and social communication

or moderate to high difficulty combined with learning and two of:

- hearing
- vision
- mobility
- language use and social communication.

Verification levels

ORS has two verification levels:

- o Very High and
- o High including Combined Moderate Ongoing Needs.

Appropriate applications

Applications are appropriate for children and students with the highest special education needs who are:

in transition to school from an early intervention programme

5 - 6 years old with little or no involvement in early childhood education

identified with a significant increase in their level of needs

recent or intending immigrants to New Zealand.

ORS criteria

The criteria are at two levels: Very High, and High which includes Combined Moderate Needs. Each criterion (or sub-criterion of Combined Moderate Needs) relates to a particular area of need: learning, hearing, vision, mobility, or language use and social communication.

Table 1: Relationship between area of need and criterion level

	Very High	High
Learning	Criterion 1	Criterion 5
		Criterion 9 (9.1 plus 2 other)
Hearing	Criterion 2.1 and 2.2	Criterion 6.1
		Criterion 9 (9.1 + 9.2 + 1 other)
Vision	Criterion 2.3	Criterion 6.2
		Criterion 9

		(9.1 + 9.3 + 1 other)
Physical	Criterion 3	Criterion 7
		Criterion 9 (9.1 + 9.4 + 1 other)
Language use and social communication	Criterion 4	Criterion 8
		Criterion 9 (9.1 + 9.5 + 1 other)

The following section describes each of the nine criteria and provides brief profiles of students who meet them.

Criterion 1 : Students need total adaptation of all curriculum content.

This criterion is for students who have extremely delayed cognitive development. At age five they are at the earliest levels of child development.

For example, they are learning:

through sensory exploration e.g. by putting objects in their mouth

to wave bye-bye in response

to take turns at making sounds

to respond to their names

to imitate a simple action

to visually track people moving nearby

to smile at a familiar person.

Throughout their schooling, students will require very high levels of specialist teacher and other specialist interventions for intensive programming.

Towards the end of their schooling, the students may achieve some early developmental goals. When they leave school they will need fully supported living, working and recreational/leisure services.

Criterion 2: Students need special assistance to engage in all face to face communications.

2.1 Students who rely totally on signing for communication.

2.2 Students who rely totally on the help of a trained person for communication following a cochlear implant.

2.3 Students who rely totally on Braille for reading and writing.

Criterion 3: Students need specialist one-to-one intervention at least weekly, and/or specialist monitoring at least once a month together with daily special education support provided by others. This support must be to help with mobility and positioning or personal care.

This criterion is for students who have an extremely severe physical disability with spasticity or low tone, and difficulties with eating, speaking and swallowing. They may be extremely fragile.

These students are unable to move, change position, sit, eat, dress, grasp, or release or manipulate objects independently. Daily care, physical support and supervision are part of their programmes. They require specialised equipment such as wheelchairs, fully supportive seating systems and standing frames, and need to be lifted and positioned in equipment safely. They may require aids for communication, tubes for feeding and specialised equipment for toileting.

These students require specialists such as physiotherapists and occupational therapists or conductors. Continuing therapist involvement is critical for the development of physical skills and to maintain physical wellbeing so that appropriate learning can occur. Students are also very likely to require a speech-language therapist because of eating difficulties and communication needs.

In addition, students with a deteriorating condition who are no longer independently mobile and have significant difficulties with swallowing, respiration and use of their limbs meet this criterion.

Criterion 4: Students need specialist one-to-one intervention at least weekly, or specialist monitoring at least once a month together with daily special education support provided by others. This support must be to help with needs arising from a severe disorder of both language use and appropriate social communication.

This criterion is for students who have communication and social behaviour that is extremely unusual, repetitive and inappropriate in their social context. They have an absence or severe impairment of social interaction, communication and imagination and carry out a narrow, rigid and repetitive pattern of activities that appear meaningless to others.

The intensity and combination of these characteristics vary with each student, but are apparent most of the time.

These students with very high needs:

seem remote and unaware of others. It is extremely difficult to gain their attention which is only achieved when the student has a very strong need

have very severe processing problems and seldom respond when spoken to or give any indication that they understand the purpose of communication. They are mainly non-verbal, may use a word occasionally and lack interest in imitating actions or words

often show a fascination for specific objects or actions that are used in a ritualistic way are extremely anxious and disruptive in new environments or situations and unable to tolerate change or variation in routines

may communicate their feelings (including distress, frustration and confusion) through aggression or self-abusive behaviour. For some students self-injury can also be a repetitive habit.

These students need frequent, intensive psychologist and/or speech-language therapist intervention to take their unusual and inappropriate behaviours into consideration while helping them to engage, be understood, to respond and learn.

Criterion 5: Students need significant adaptation of almost all curriculum content.

This criterion is for students who have a severe delay in cognitive development resulting in major difficulties with learning across almost all curriculum areas.

At five, they are learning the skills and knowledge usually achieved by children up to, or sometimes just beyond, two and a half years of age.

For example they can:

stay at activities with 1:1 adult support

solve simple problems e.g. giving a container to an adult to open

label some familiar objects

operate a cause and effect toy

sometimes follow a simple one step instruction, for example, 'Bag away' when the adult models the action

use some two-word phrases e.g. 'mummy drink'.

With constant repetition, they are learning to:

match up to two colours

demonstrate early concepts such as in and out

follow basic routines.

Throughout their schooling they will require high levels of input from specialists and specialist teachers using particular teaching strategies. Their Individual Education Plans (IEPs) will focus on developing practical skills and knowledge for independence.

Nine and ten year old students will still be learning skills and concepts usually demonstrated independently by four year old children.

Towards the end of their schooling most students will still be working within Level One objectives of the New Zealand Curriculum through activities that are appropriate to their age levels. When they leave school they will require supported employment and other relevant services.

This criterion is not for students who have specific difficulties with only some parts of the curriculum, such as receptive and expressive language, literacy and numeracy.

Criterion 6: Students need specialist teacher contact time of at least half a day per week. Or Students have a severe or profound hearing impairment and need regular input from a teacher with specialist skills in deaf education to access the curriculum.

Students who meet this criterion:

have a severe (71 - 90 decibels) or profound bilateral sensori-neural hearing loss, and use hearing aids and/or a cochlear implant full time and usually use an FM system, and use spoken language as their primary means of communication and may use sign language and gestures.

They require frequent oral interpreting of information in learning settings and need pre- and post-teaching of concepts.

Other students may meet this criterion and be included in the Scheme because they have a bilateral sensori-neural hearing loss in the moderate-severe range with:

a late diagnosis and/or

poor management of hearing loss in their early childhood and school years.

This criterion is not for students with a conductive-only hearing loss or with a central auditory processing disorder.

6.2 Students have severe vision impairment and need regular input from a teacher with specialist skills in vision education to access the curriculum.

Students who meet this criterion may:

have low vision in the severe range with visual acuity of 6/36 or beyond after best possible correction

have a loss restricting field of vision to 15-20 degrees

be blind but unlikely to learn Braille.

A student who meets the criterion usually needs:

specialist teaching of concepts

specialist advice to class teachers to improve access to the curriculum

a desk copy of any work presented from a distance

enlarged print

a range of assistive equipment

orientation and mobility instruction for independence.

This criterion is not for students with visual perception difficulties alone.

Criterion 7:Students need specialist one-to-one intervention on an average of once per month, and/or specialist monitoring on an average of once per school term together with daily special education support provided by others. This support must be to help with mobility and positioning or personal care.

This criterion is for students who have a severe physical disability and are unable to stand and walk without support. They are often able to move themselves independently at floor level, for example, by crawling. They usually have poor hand control, and cannot independently dress, eat, hold a cup, or maintain their stability when sitting on the toilet.

These students need considerable personal support for mobility, positioning, changing direction in their wheelchairs or walkers, and for meeting personal care needs. Most of these students have manual or power chairs, walkers and specialised seating. They are likely to require considerable help to get in and out of their equipment and to manoeuvre their wheelchairs or walkers.

They require a high level of continuing intervention and monitoring from specialists such as physiotherapists, occupational therapists, or conductors. Therapist involvement is critical for the development of physical skills and to maintain physical wellbeing so they have access to the curriculum. They may also require a speech-language therapist because of eating and communication needs.

In addition, a student with a deteriorating condition, such as Muscular Dystrophy, who is having frequent falls and difficulty with steps or slopes, and is using a wheelchair for distances, will meet the criterion.

Criterion 8: Students need specialist one-to-one intervention on an average of once per month, or specialist monitoring on an average of once per school term together with daily special education support provided by others. This support must be to help with needs arising from a severe disorder of both language use and appropriate social communication.

This criterion is for students whose communication and social behaviours are very unusual and inappropriate in their social context. They have a combination of severe difficulties with social interaction, communication and imagination and carry out rigid and repetitive behaviours. The particular combination and intensity of these characteristics vary but are apparent most of the time.

These students:

are difficult to engage in almost all learning and social activities. They show frequent avoidance behaviour and require prompting to participate. As a consequence their learning achievements are significantly delayed

usually distance themselves from social situations and seem to be largely unaware of people around them although they may respond positively to their parents and other very familiar people

often have trouble understanding and using non-verbal communication. They may take a person to something they want but do not indicate this by pointing or gesturing. These students also have severe difficulties processing verbal information. Some recognise symbols and words but do not demonstrate how to use this knowledge. Some use learned phrases and ritualised words that appear irrelevant to the current topic and may have little meaning for others

are severely distressed by change, needing to be reassured even when prepared in advance for new environments or changes in routines. Feelings of confusion or frustration may result in sudden changes in emotions.

Most students who meet this criterion have a diagnosis of autism but some have another, or no, medical diagnosis. A very small number of older students with a severe mental health condition also meet this criterion.

These students need regular specialist interventions from a psychologist and/or speech-language therapist to take into account their unusual and inappropriate behaviours while promoting learning and participation in social interactions.

This criterion is not for students who, despite major difficulties with communication and/or social behaviour, can be engaged to participate in meaningful learning in the curriculum.

Criterion 9: Students with Combined Moderate Needs.

Criterion 9 is for students with moderate-to-high learning needs in combination with two other needs at the moderate-to-high level. The three needs inter-relate to significantly reduce a student's ability to access the curriculum.

These students require assistance throughout their schooling from specialists and teachers to access the curriculum, and to support the development of Essential Skills and learning achievements.

Towards the end of their schooling many students will be achieving most Level One objectives and beginning to work on Level Two objectives of the Essential Learning Areas. These achievements will be supported by specialist programmes and equipment. When the students leave school, they may require ongoing support services.

Sub-criterion 9.1 is a pre-requisite for eligibility.

9.1 Students need significant adaptation of most curriculum content.

This sub-criterion is for students who have delayed cognitive development. At five, students will be learning skills and knowledge usually achieved by children up to three and a half years of age.

For example, they can:

complete three to four piece puzzles

name familiar objects in pictures

demonstrate an understanding of some early concepts, such as big/little, in/out

match colour, shape and size

give one object on request and sometimes two

demonstrate simple problem-solving

use sentences of three or more words.

With frequent repetition, they are learning to:

respond appropriately to questions such as what? where?

imitate a vertical and a horizontal stroke and need:

prompts about toileting and other routines of daily care

frequent prompts to stay and complete activities.

9.2 Students need specialist teacher intervention and monitoring to assist with a moderate hearing impairment.

This sub-criterion is for students who have a moderate or moderate-severe hearing loss (41 - 70 decibels) and use hearing aids for learning.

These students need specialist advice and teaching strategies to improve their language development, understanding of concepts and Essential Skills.

This sub-criterion is not for students who have a central auditory processing disorder.

9.3 Students need specialist teacher intervention and monitoring to assist with moderate vision impairment.

This sub-criterion is for students who have moderate vision impairment with visual acuity of 6/24 after best possible correction and/or a loss restricting the field of vision to 30 - 60 degrees. These students need specialist advice and teaching strategies to access the curriculum. This sub-criterion is not for students who have visual perception difficulties alone.

9.4 Students need specialist intervention and monitoring to assist with moderate physical needs.

Students who meet this sub-criterion have moderate to high difficulties with gross and fine motor skills. They usually require environmental adaptations, specialised equipment or technology and adaptations to the curriculum in physical education, technology, written language and Education Outside the Classroom.

These students require physiotherapist and/or occupational therapist involvement to help maintain their physical wellbeing and to advise on special equipment and adaptations.

9.5 Students need specialist intervention and monitoring to assist with a moderate disorder of both language use and appropriate social communication.

This sub-criterion is for students who have both language and social behaviours that are unusual, repetitive and inappropriate in their context, and impact on learning and social interactions.

They have difficulty understanding or communicating through non-verbal cues and rarely use speech for reciprocal, conversational purposes. They often have an unusual

tone of voice and speak very precisely. Some are very literal, misinterpret what they hear, have a narrow range of obsessive interests and talk on and on about the same topic.

Some students have good rote learning skills but have difficulties with comprehension and generalisation. They often lack empathy, are socially isolated and are inflexible. Their resistance to change can cause anxiety and lead to aggression and other inappropriate behaviour.” (Ministry of Education, January 2011)

Appendix 3: Observation Schedule Categories

Date:

Student:

Time & context:

Observations noted every 30 seconds

Whole School activity	Whole class activity	Small group activity	Paired activity	Individual work
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talking about child involved in the learning activity							sleeping S walking and W running R shouting out S other O
Child involved as much as others	Child somewhat involved	Child involved purely physically	Child not involved at all	Child off task but engaged with own task	Child off task but engaged with peers	Child off task but engaged with adult/s	Child off task and disengaged

x took place but not acknowledged		x took place but not acknowledged		specific effort made to ensure child receives some of the information	no effort made to ensure child receives some of the information
peer to child communication - acknowledged by child	peer to child communication - reciprocated by child	adult to child communication - acknowledged by child	adult to child communication - reciprocated by child	adult to class communication - child included	adult to class communication - child did not acknowledge

Appendix 4: Education Review Office/Te Tari Arotake
Matauranga (ERO) webpage defining effective teaching in
New Zealand.

“Effective teaching - Key evaluative questions

- How effectively do teachers set and share high expectations for student learning?
- How effectively do teacher practices and pedagogies promote student learning?
- How effectively do teachers use data to identify student needs, design learning programmes and monitor progress?
- How effectively is support provided for students who are at risk of not achieving or who have particular learning needs?
- What is the quality of relationships and interactions between teachers and students, and among students?

Introduction

Effective teaching is potentially the largest single school influence on student achievement. Effective teachers have high expectations that all their students will achieve to their potential and are committed to providing a high quality education for all their learners. They treat children and young people as individuals, positively acknowledging their differences and building collaborative learning relationships. Effective teachers are approachable, communicate clearly with parents and whānau, and listen to the aspirations and concerns that parents and whānau have for their children. They are responsive and take appropriate action.

Effective teachers have comprehensive pedagogical and content knowledge of their subject areas and a deep understanding of the learning process. They provide learning-rich programmes that make connections to students’ prior learning and experiences and respond to students’ needs and interests. Effective teachers use a range of assessment data to differentiate the curriculum as needed and engage learners in purposeful learning through a range of media and resources.

Effective teachers provide thoughtful on-going feedback and use strategies that enable students to become self-managing, motivated learners who take responsibility for their learning.

Self review and effective teaching

Self review involves teachers reflecting on their practice and the impact that their teaching is having on student achievement. This ‘teaching as inquiry’ approach helps teachers to change their teaching practice to meet the needs of all their students. On-going data-gathering provides information to assist in monitoring student engagement, progress and achievement, adapting learning programmes and strategies and identifying students who need further challenge or additional support. Reflection also helps teachers design focused personal goals and select relevant professional learning to achieve these goals. Critically reflective teachers keep up to date with research, including conducting small research projects of their own (such as action research) and constantly evaluate their own teaching against models of good practice.

Effective Teaching - Evaluative Prompts, Indicators and Evidence

Key evaluative questions

- How effectively do teachers set and share high expectations for student learning?
- How effectively do teacher practices promote student learning?
- How effectively do teachers use data to identify student needs, design learning programmes and monitor progress?
- How effectively is support provided for students who are at risk of not achieving or who have particular learning needs?
- What is the quality of relationships and interactions between teachers and students, and among students?" (Education Review Office (ERO, 2011)

Appendix 5: The Impact of Inclusion Questionnaire (IIQ)

Development of the scale is reported in:

Hastings, R. P., & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs. *Educational Psychology*, **23**, 87-94.

Listed below are a number of statements about children with special needs. Please read each statement carefully. Use the scale below each statement to indicate your agreement or disagreement with the statement. Circle the point on the scale that best represents your opinion.

- VSA = Very strongly agree
- SA = Strongly agree
- A = Agree
- U = Undecided
- D = Disagree
- SD = Strongly disagree
- VSD = Very strongly disagree

If you agreed with the statement, you would circle VSA, SA, or A, depending on how strong your agreement was. Similarly, if you disagreed with the statement you would circle VSD, SD, or D. If you were undecided about your opinion, you would circle U. ***Please indicate your opinion about all of the following statements.***

Having a child/children with autistic spectrum disorder (ASD) in my classroom would...

1.	...physically wear me out (T) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
2.	...interrupt the classroom routine (E) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
3.	...not prevent me from giving attention to the other children in the class (O)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
4.	...give the children with autism an audience to perform to (C) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
5.	...drain the school's financial resources (E) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
6.	...not place me under additional stress (T)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
7.	...lead to rejection from other children within the classroom (C) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
8.	...upset the other children in the classroom (O) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
9.	...not pose a physical threat to me	VSD SD D U A SA VSA

	(T)	1 2 3 4 5 6 7
10.	...negatively affect the smooth running of the school (E) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
11.	...not cause disruption within the classroom (E)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
12.	...increase other children's problematic behaviour in the classroom (O) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
13.	...be popular with parents (E)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
14.	...take up a disproportionate amount of my time (T) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
15.	...not place the other children in danger (O)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
16.	...not encourage the child with ASD's difficult behaviour (C)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
17.	...not drain me emotionally (T)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
18.	...hold back the child with ASD's academic performance (C) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
19.	...give people a more positive view of the school (E)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
20.	...will not be a frightening experience for the child with ASD (C)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
21.	...increase my workload to an unacceptable level (T) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1
22.	...increase other children's learning opportunities in the classroom (O)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
23.	...benefit the child with ASD's personal development (C)	VSD SD D U A SA VSA 1 2 3 4 5 6 7
24.	...negatively affect the achievement of other children in the classroom (O) (R)	VSD SD D U A SA VSA 7 6 5 4 3 2 1

T = impact on teacher

E = impact on environment

O = impact on other children

C = impact on the target child

Numbers: 1, 6, 9, 14, 17, 21

Numbers: 2, 5, 10, 11, 13, 19

Numbers: 3, 8, 12, 15, 22, 24

Numbers: 4, 7, 16, 18, 20, 23

R = negatively worded items that should be reverse scored, so that high scores indicate a more positive attitude.

Item 24 was excluded from other child scale in Hastings & Oakford 2003.

Each item is scored 1-7, with 7 indicating the most positive attitude.

Appendix 6: Teacher Questionnaire

Name:

Date:

Teacher Questionnaire

Thanks for agreeing to participate in my PhD research project. Please fill out this brief questionnaire. The information you give me will help me make sure I meet your needs during the group professional development sessions.

1. What does ASD stand for?
2. Have you ever met a child with ASD? Yes No Maybe
3. Have you ever taught a child with ASD? Yes No Maybe
4. What are the three main characteristics of ASD?
 - a).....
 - b).....
 - c).....
5. What kinds of support do you think teachers need in general to help them teach children with ASD?
.....
.....
.....
6. What kind of support would you like if a child with ASD was placed in your class tomorrow?
.....
.....
.....
7. Do you think you would benefit from in-service training in the area of ASD and inclusion?
Yes No Maybe
8. If so, what would you like to see included in the training?
.....
.....

Thanks for your time,

Emma Goodall, PhD Student Canterbury University, elq21@student.canterbury.ac.nz

Name:

Date:

Teacher Questionnaire – follow up

Many thanks for participating in my PhD research project. I hope it was useful. This questionnaire will help me evaluate my work during the project, so that I can plan improvement for next time I work with teachers.

1. What does ASD stand for?

2. Have you ever met a child with ASD? Yes No Maybe

3. Have you ever taught a child with ASD? Yes No Maybe

4. What are the three main characteristics of ASD?

a).....

b).....

c).....

5. What kinds of support do you think teachers need in general to help them teach children with ASD?

.....
.....

6. What kind of support would you like if a child with ASD was placed in your class tomorrow?

.....
.....

7. Did you attend any other in-service training in the area of ASD and inclusion this year?

Yes No

If yes please give details below:

Course Title: Date(s).....

Course Provider:

8. If so, was the training useful? Yes No Maybe

9. Was participating in *this project* useful? Yes No Maybe

10. How well do you feel you can meet the inclusion needs of a child with ASD following on from this

year? Yes No Maybe

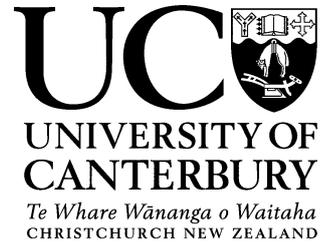
.....
.....

Thanks for your time, Emma Goodall, elg21@student.canterbury.ac.nz

Appendix 7: Ethics: Informed consent forms and information

letters

PARENT/CAREGIVER DECLARATION OF CONSENT



Inclusive classrooms and collaborative questions – a case study

I have read and understood the information given to me about the research project and what will be required of my child/the child in my care. I understand that my child's level of presence, participation and learning are being observed to look at the role of professional development in supporting teachers to meet the needs of students with ASD and are not to place value judgements on my child.

I have discussed the project with my child and am happy for him/her to participate in the research.

No findings that could identify my child or his/her school will be published. I understand that all data from this research will be stored securely at the University of Canterbury for five years following the study.

I understand that participation in this project is voluntary and that I can withdraw my child or he/she can withdraw from the project at any time without repercussions.

I understand that I will receive a report on the findings of this study and have provided my email details below for this purpose.

By signing below, I agree to my child participating in this research project.

Name:

Child's name:

Date:

Signature:

Email address for report on study:

Please return this form to your child's teacher by next Monday

BOARD OF TRUSTEES/PRINCIPAL DECLARATION OF CONSENT

Inclusive classrooms and collaborative questions – a case study

I have read and understood the information given to me about this research project and what will be required of the teachers and students at school.

The Board of Trustees and the Principal have discussed the project and agree to allow individual teachers at this school to participate in the research. I understand that their participation is voluntary and that they may withdraw at any time prior to publication of the findings.

I understand that any information published or reported results will not identify individual teachers or this school.

I understand that all data from this research will be stored securely at the University of Canterbury for five years following the study.

I understand that I will receive a report on the findings of this study and have provided my email details below for this purpose.

By signing below, I agree to this school participating in this research project.

Name:

Position:

Date:

Signature:

Email address for report on study:

Please return this completed consent form by placing in my cubby by 1/11/09

Thank you for your contribution to this study.

Emma Goodall

PhD Student, Canterbury University

TEACHER DECLARATION OF CONSENT

Inclusive classrooms and collaborative questions – a case study

Thank you for reading the information letter, outlining the research and what it means for you. Please do not hesitate to contact me should you have any questions or concerns,

I have read and understood the information provided about this research project.

I understand that my participation is voluntary and that I may withdraw at any time prior to publication of the findings.

I understand that any information or opinions I provide will be kept confidential to the researcher and that any published or reported results will not identify me or my institution.

I understand that all data from this research will be stored securely at the University of Canterbury for five years following the study.

I understand that I will receive a report on the findings of this study and have provided my email details below for this purpose.

By signing below, I agree to participate in this research project.

Name:

Date:

Signature:

Email address for report on study:

Please return this signed form to Emma (or put in her cubby) *by 10/11/09*

Chosen pseudonym:

Nb – name in relation to pseudonym information will not be released and will be destroyed upon completion of research.

Thanks

Emma Goodall , PhD Student, Canterbury University

OBSERVED STUDENT CONSENT FORM

Inclusive classrooms and collaborative questions – a case study

I understand the information about the project.

I have talked to my parents/caregivers about it.

I understand that I can change my mind about taking part in any discussion and no-one will mind.

I know that if I have any questions I can ask my parents or caregivers, my teacher or Emma.

I agree to talk to Emma.

I am happy to be in the classroom when observations of my teacher and myself are taking place

Name:

Date :

Signature:

Please return this form to your class teacher.

STUDENT CONSENT FORM

Inclusive classrooms and collaborative questions – a case study

I understand the information about the project.

I have talked to my parents/caregivers about it.

I understand that I can change my mind about taking part in any discussion and no-one will mind.

I know that if I have any questions I can ask my parents or caregivers, my teacher or Emma.

I am happy to be in the classroom when observations of my teacher are taking place

I agree to talk to Emma. Yes / No

Name:

Date :

Signature:

Please return this form to your class teacher.

BOARD OF TRUSTEES & PRINCIPAL INFORMATION SHEET

Dear Board of Trustees/Principal/Teachers/Parents

Inclusive Classrooms and Collaborative Questions – a case study

I am carrying out research into improving outcomes for students with Autistic Spectrum Disorders (ASDs) in mainstream education, through teacher professional development. I have enjoyed working at your school for over a year and a half as a special needs teacher and advisor, and am aware of all the work that everyone here already does in this area. The purpose of this research is to evaluate what support teachers need to enable them to create more inclusive learning environments for the children *not* to judge the abilities and skills of individual children and teachers.

I am undertaking this research as a PhD student in the School of Educational Studies and Human Development at the University of Canterbury. My supervisors (and their contact details) are Dr Missy Morton (ph 3458312; missy.morton@canterbury.ac.nz) and Associate Professor Alison Gilmore (ph 3642259; alison.gilmore@canterbury.ac.nz).

Teachers who take part will receive four group professional development sessions during terms 1 & 2 2010. They will also take part in fortnightly discussions with me, following on from observations in their classrooms of the interactions between themselves and the child, and the child with the curriculum. These teachers will not need any extra classroom release as meetings will be scheduled outside teaching time. Between 3 and 5 teachers from your school will be able to participate in this research. Each teacher will have at least one student with ASD in their class in 2010. These students will need to have a diagnosis of ASD (medical or after evaluation using the GARS-2), but do not need to be ORRS funded.

The professional development sessions will look at ASD and its implications for teaching and learning as well as practical tips for inclusion. There will be two brief questionnaires sent to participating teachers before and after the course. I will also do a time-trial observation of the children with ASD at the start and in term 3. These observations will be to see if there is any change in the presence, participation and learning for those children over the course of the intervention.

The University of Canterbury Educational research Human Ethics Committee has reviewed and approved this study.^{1&2}

Please be assured that particular care will be taken to ensure the confidentiality of all data gathered for this study and the anonymity of participants and their institutions in all publications of the findings. All raw data will be held securely, in password protected facilities and/or locked storage at the University of Canterbury, and kept for a minimum period of 5 years following completion of the project and then destroyed. Please also note that participation in the study is voluntary. If you do participate, you have the right to decline to answer any questions and to withdraw from the study at any time prior to publication.

All participating teachers will receive a full report of the results and recommendations of this study.

I would appreciate it if you would **place the signed consent form** in my cubby **by 1/11/2009**.

If you have any questions about this research, please do not hesitate to contact me.

Thank you in advance for your contribution.

Yours sincerely,

Emma Goodall
PhD Student Canterbury University

PARENT INFORMATION SHEET

Inclusive Classrooms and Collaborative Questions – a case study

Dear Parents,

I am carrying out research into inclusive classrooms in New Zealand. I have been working at your school for over a year and a half as a special needs teacher and advisor. I am undertaking this research as a PhD student in the School of Educational Studies and Human Development at the University of Canterbury. My supervisors (and their contact details) are Dr Missy Morton (ph 3458312; missy.morton@canterbury.ac.nz) and Associate Professor Alison Gilmore (ph 3642259; alison.gilmore@canterbury.ac.nz).

I will be supporting teachers during 2010 to work with their children using classroom observations and then talking with the teacher. The individual child and teacher's abilities and skills are not being observed nor judged, the observations are to evaluate what support teachers need to enable themselves to create more inclusive learning environments for the children in their classrooms.

Although your child will be present during classroom observations, they are not being observed directly. However, as I will be observing in the classroom setting, all the children in class will need parental consent.

Particular care will be made to ensure confidentiality of all data gathered for this study and the anonymity of participants and their schools in all publications of the findings. All raw data will be held securely, in password protected facilities and/or locked storage at the University of Canterbury, and kept for a minimum period of 5 years following completion of the project and then destroyed. All participants will receive a report on the findings of this study.

If you are not happy for your child to be present when I observe in the classroom, other arrangements will be made for your child.

The University of Canterbury Educational Research Human Ethics Committee has reviewed and approved this study.^{1&2}

Attached is a consent form for you to read and return to your child's class teacher by Monday next week. Please do not hesitate to contact me should you have any questions or concerns,

Kind regards

Emma Goodall
PhD Student University of Canterbury

NB – Parents of the students on the AS were met with individually to gain informed consent for me to specifically observe the interactions between their child and their child's class teacher. These parents had 30-60 minute meetings to discuss the reasons behind the research and the research focus before signing their informed consent form.

Inclusive classrooms and collaborative questions – a case study

Hi,

My name is Emma, and you may have seen me around school. I have been working at your school for over a year and a half and now I am carrying out my research project for my university degree.

I will be working with your teacher during 2010. To do this I am going to visit your class and watch what happens and then talk with your teacher. When I am watching, I like to write lots of notes. Some of you will have seen me do this already. These notes help me remember what I have seen. I will ask everyone to choose a code-name so that when I write my report no-one will know who I am writing about.

If I am going to write something that you said in my report, I will let you and your family know, so that you can tell me if it is ok.

You don't have to talk to me when I visit your class if you don't want to.

Please ask me if you have any questions. Thank you for thinking about helping me with my project.

Emma Goodall

Appendix 8 – IEP format

Name:

Date of meeting:

Team members present:

Review date meeting to be held on:

Current strengths:

Gains made since previous IEP:

Long term goal:

Short term goal	Specific learning outcome and how we will know it has been achieved	Strategies to implement goal - summary of Curriculum Adaptation, Teaching Strategies, Resources etc	Who will be responsible	daily, x by weekly or dates strategies implemented
1				
2				
3				